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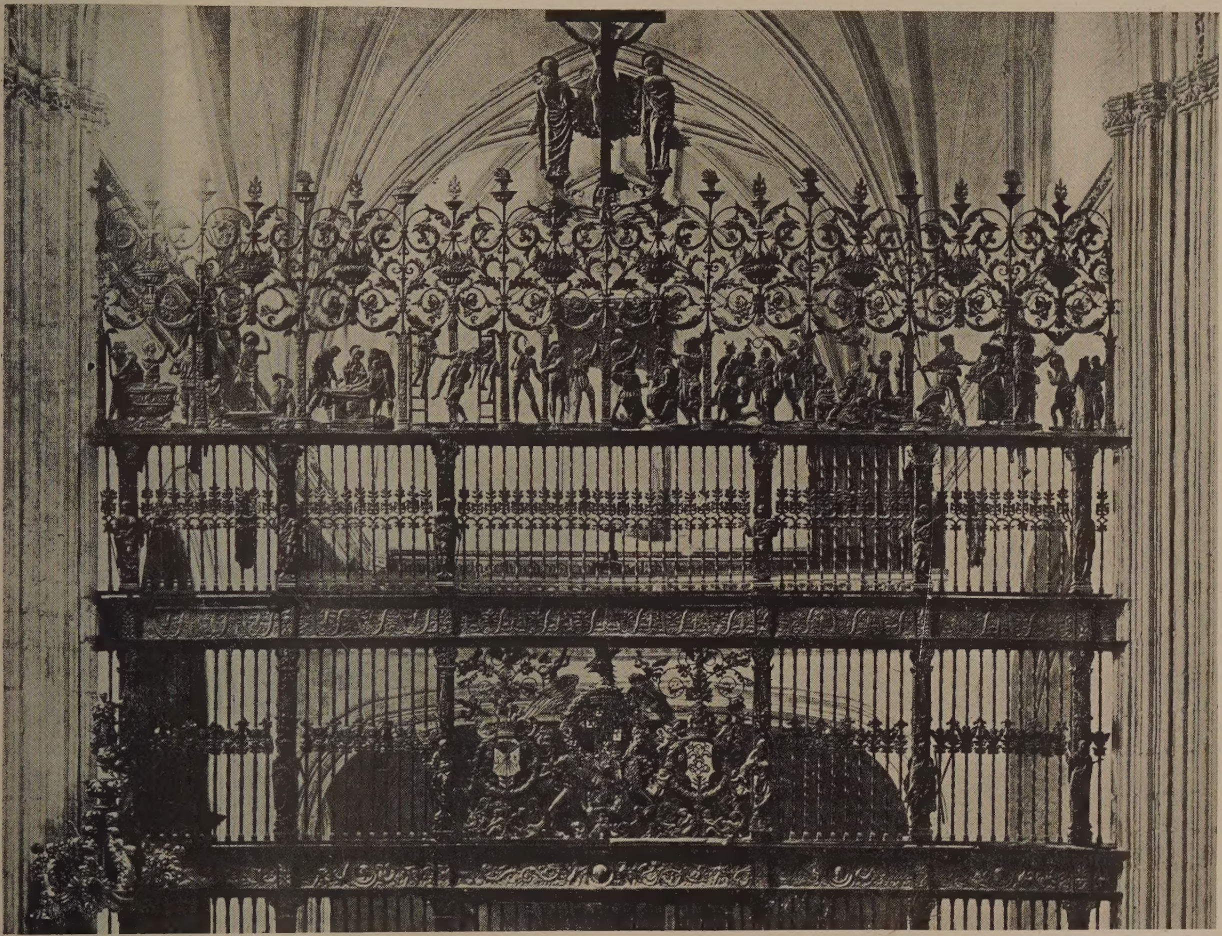


PLATE I. DETAIL OF THE REJA OF THE ROYAL CHAPEL (1523) GRANADA CATHEDRAL.

IV. Rejeria of the Spanish Renaissance

The Granada and the Sevilla Cathedrals

WITH the use of spindles "in ranks and rows, literally in thousands," the attenuated pilaster emerged from its previous inconspicuousness and took on the imposing massiveness illustrated in the detail from Granada (Plate II). Though only a simulated massiveness (for the huge pilaster was in reality a stout wooden beam covered with iron plates), its proportions emphasized the general architectural character of the whole. The embossing of its metal sheath shows how, if the artisan were not actually a silversmith, he was at least far more conversant with the art of working silver than with the vanishing methods of early blacksmithing. This is again apparent in the introduction of many finely modeled medallion portraits in repoussé, and even large compositions by the same process, as in Plate III, from Seville. It was the versatility, too, of the man trained in many crafts that brought heraldic

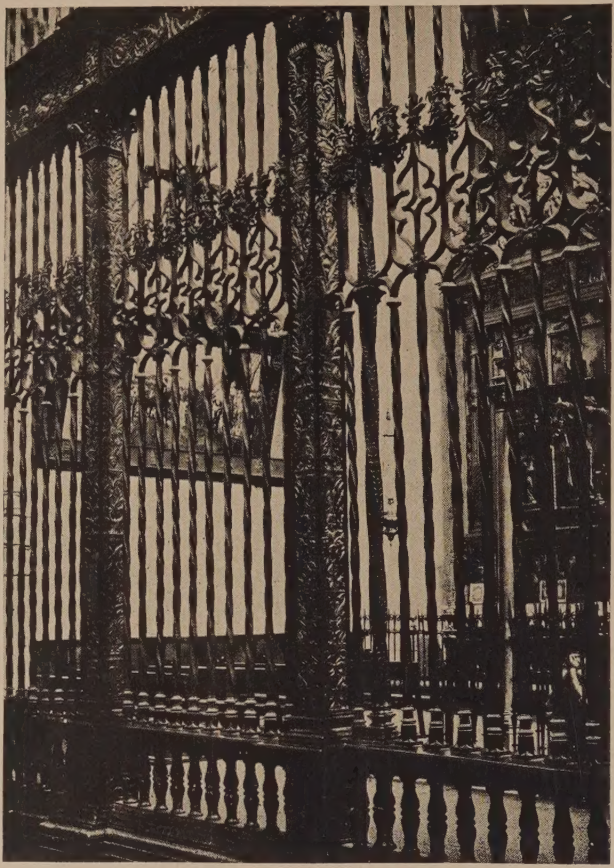


PLATE II. DETAIL OF THE LOWER STAGE OF THE REJA OF THE ROYAL CHAPEL (1523) GRANADA CATHEDRAL.

ornament into such prominence in ironwork. Gotico-florido had adopted the use, in a rather blunt way, of armorial bearings; Renaissance artists, quick to catch any happy suggestion, turned heraldry into a *leitmotif,* as it were;—the theme of the Reja, the only break in a succession of lofty verticals—and made it splendid with gold and color.

As for the human figure, which, after the spindle, may be considered the Renaissance worker's most distinctive contribution to Reja-making, it now became nearly life size, and was used with a profusion that may possibly be accounted for as a reaction against the Moorish ban on human presentment in art. The intrepid rejero did not hesitate to group his personages into historical and biblical compositions. Plate I shows thirty or more scriptural figures in the cresting of the marvelous Granada Reja, posed in a variety of attitudes and as facilely executed as if they had been clay and Maestre Bartolomè a modeler. Such an achievement confuses all one's previous ideas of stubborn as opposed to plastic materials.

Here then, with pilasters and spindles in the structure, and all legitimate Italian motifs along with the Spanish blazon in the ornament, are the chief elements that went to the rearing of the Renaissance Reja. To have used them almost invariably in the right place and in the right proportions, proves the Sixteenth Century rejero an artist of the highest rank.

About the time that Renaissance was in full swing a change in the interior arrangement of Spanish churches was decided upon that gave great impetus to Reja-making. It had already been stimulated by the extended use of Rejas in the side chapels as well as in the capilla mayor; for these smaller shrines, as the peninsula was gradually reconquered from Mohammedanism and the religious zeal of the victors became a veritable contagion, grew to be storehouses of an amazing quantity of extravagant offerings that required worthy protection. But the circumstance most contributory to the extraordinary proportions and corresponding splendor of the Spanish Rejas was the change referred to above —the removal, in the early Sixteenth Century, of the priests' choir from the east end into the nave of the cathedral. This coro then faced the altar mayor; like it, it was generally enclosed on three sides by masonry and screened on the fourth by a Reja; and this Reja, being opposite that of the altar, had to be equally grand. So grand, in truth, did they both become that we learn of the Cortes protesting against their enormous cost. Liturgical and not architectural considerations placed the coro in the nave, which it blocks up in a way that lamentably reduces the aesthetic value of space and proportion; but the change, in creating demand for a second lofty screen, offered a stupendous opportunity to the rejero. He had already discovered in enclosing the altar that iron is most appropriately used when on a grand scale; two monumental Rejas, face to face, harmonious in design and dimensions, and separated only by the width of the transept, invited him to perform transcendent feats.

The point to which the architecturalizing of the Spanish Reja was carried from this time on is amazing. By this is

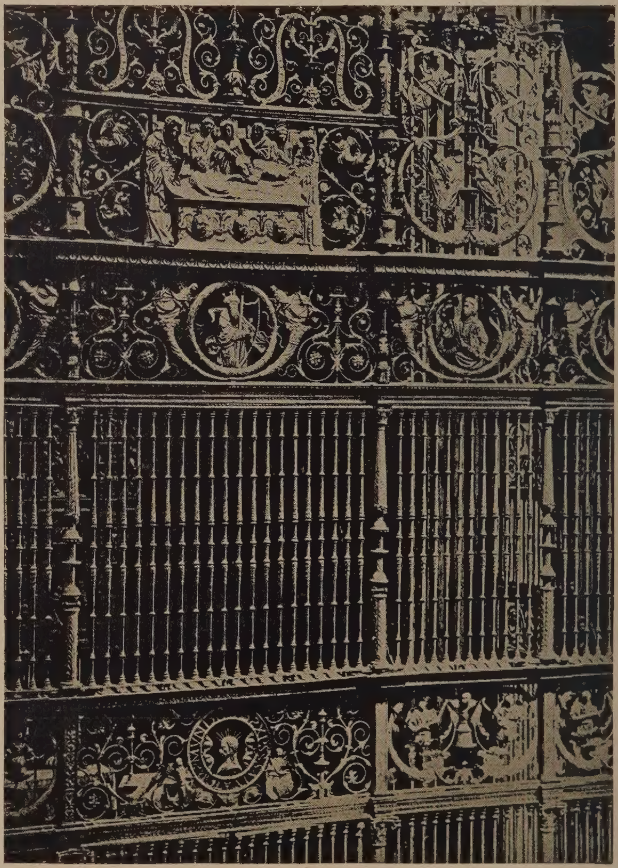
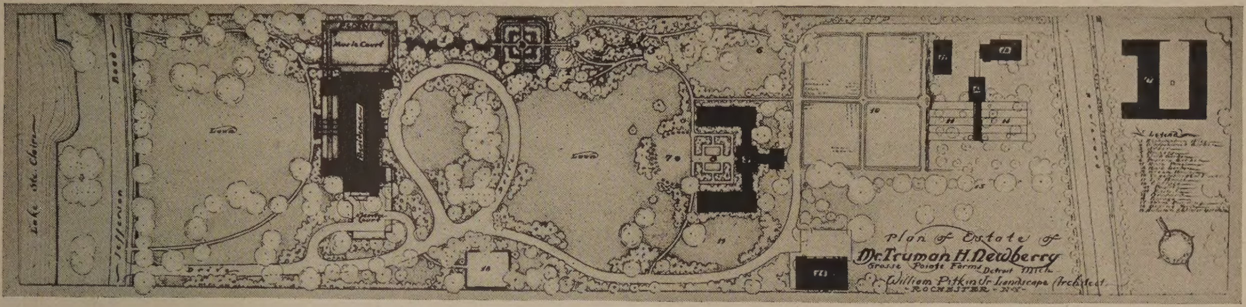


PLATE III. DETAIL OF THE HIGH ALTAR REJA, SEVILLA CATHEDRAL.

not meant the forcing of iron into classic forms and proportions in emulation of stone architecture, as was tried in England during the Eighteenth Century classic revival, but the expressing of conventionalized forms and symbolism in a manner compatible with the material, along with a design more assertively architectonic. Giving shape to iron was studied as it had never been studied before. Unfortunately the names of those who made it the vehicle of such high artistic expression are mostly unknown. Spain had no Vasari. While this painstaking biographer was recording of the Italian who made the Strozzi lanterns that "he was without an equal in the past and probably not to be excelled in the future" since in these lanterns are to be seen "cornices, columns, and capitals in iron constructed with the most surprising and masterly skill; no modern artificer having executed works in iron so large and so difficult"—while Vasari was writing this of the Italian Nicolo Grosso, Spain was producing, and had already produced, nameless unrecorded artists who had created works in iron which dwarf the beautiful Strozzi lanterns into insignificance.



"Drybrook," Residence of Truman H. Newberry, Grosse Pointe Farms, Mich.

Trowbridge & Ackerman, Architects.
William Pitkin, Jr., Landscape Architect.

ON the shores of Lake St. Clair, about ten miles north of Detroit, the village of Grosse Pointe Farms attracts the visitor by the beauty of its fine old trees, the view of the stream of big freighters and passengers steamers on their way to Duluth or to Buffalo, and the delightful home-like character of the many all-year-round residences which have been erected during the past two decades. The rapid commercial development of Detroit, coupled with the arrival of the automobile, has lead many of Detroit's leading families to choose Grosse Pointe Farms and its nearest neighbors, Grosse Pointe and Grosse Pointe Shores, for their summer and winter homes. The life in this delightful community is gay and varied, on the one hand centered about the Country Club with its fine tennis courts and its renowned golf course, and on the other hand about its unusual facilities for sailing, motor boating and hydro-aeroplaning. As is usually the case with shore front properties, the frontage of the average home grounds is narrow; but in this particular locality the depth of the properties is frequently so great as to make the map of a single estate look like a ribbon. This is one of the signs of the very early history of Detroit, for the French settlers in the early part of the eighteenth century laid out farms with narrow water frontage but of great depth. In this way the houses, located near the water, were grouped together for protection and at the same time were in direct touch with the trading on river and lake.

Thus it is that "Drybrook," the home of Mr. and Mrs. Truman H. Newberry stands on a plot about 300 feet wide and more than a mile in depth. The plan of the grounds herewith represents only a fraction of the whole property. The problem, as presented to the Architects, was to locate upon this strip of land a house which, with garden development at the southern end and the service court and entrance drive at the northern end, would fill the lot from side to side.

The setting is unusually fortunate as it was possible to place the house close to and under the branches of some fine old elms which have graced the property for many years. The new "Drybrook" has been built upon the site of the former Newberry home, and certain features which, through experience, have been found good have been retained. For example, the principal entrance to the house is in the middle of the western or rear facade. To reach this it is necessary to drive past the house on the northern side and reach the front door by means of a generous loop. This, it may be inferred, was done in order not to place an entrance door with vestibule and stair hall on the side of the house from which the lake view was to be enjoyed. It was also desired to retain, unbroken, the fine old lawn which through the years had been nurtured and guarded until it had become a thing of beauty. Mr. and Mrs. Newberry are very fond of music, particularly organ music, and this pleasure they like to share with others. They have been in the habit for years of breakfasting within sight of the lake and also of using an enclosed living porch during most of the day, placed to take advantage of the lake view. One has, therefore, in these few comments, the gist of the architectural program.

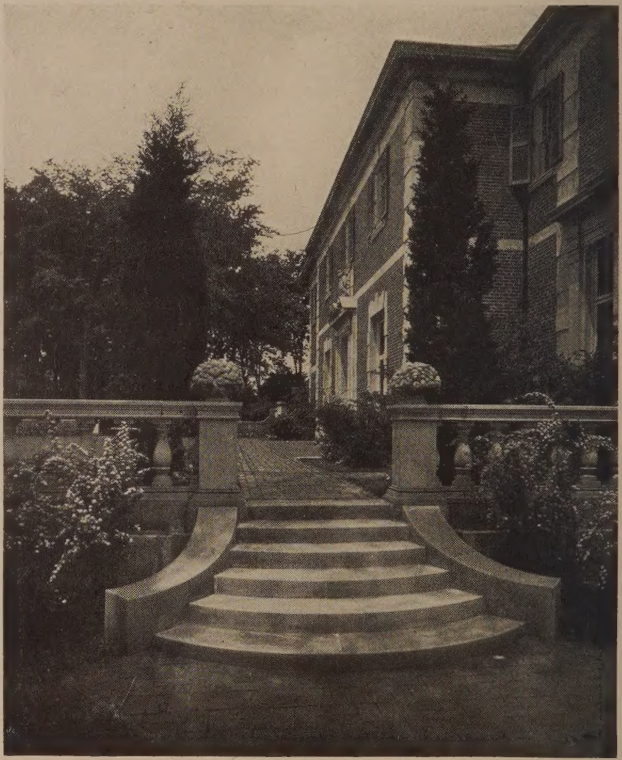
The two-story hall, being the largest element in the program, assumed naturally a dominant position in plan and facade without affecting in any real sense the general disposition of the other rooms. The service was placed at the north end because the southern end was the natural place for garden development. The owners have for years entertained out of doors—hence the music court and pergola,

placed adjacent to the music room and accessible from the loggia, from the music room and from the grounds to the west and to the east.

A Georgian house in red brick and limestone was decided upon as a type which would look well in the fine setting already provided. The style, generally, of the interior is inspired by Georgian work, though a certain variety has been obtained by not adhering to this thought in all portions of the house.

The music room is Italian in the sense that the quality of mouldings, carvings and painted ornaments is Italian rather than English. The materials, however, are similar to those used in the other principal rooms, hence harmony of effect is secured even though the use of the word "Italian" suggests an alien element in the treatment. Italian Renaissance was chosen for this room, as it seemed the most appropriate kind of environment in which to enjoy music. Here color has been employed, not lavishly yet in sufficient amount to produce a mellow atmosphere wherein the music of the masters may be enjoyed in comfort and to the satisfaction of those who also love color. A fine organ lies behind the carved screen at the western end of the room. The ceiling, painted by Faustino Sampietro of New York, has been brought to the point where it gives the charm of antiquity without in any way suggesting an imitation of an old ceiling. In fact, the entire house has been studied from this point of view, *i. e.*, to so finish mouldings, carvings and even flat surfaces as to secure the impression of the antique without anywhere endeavoring to imitate.

The finish on the first floor is generally in soft toned stained and waxed woods while the second floor is in enamel. The wood in the music room, stair hall, two-story hall and dining room is butternut. The loggia is in Italian walnut, the library in mahogany and the office in California red wood. The floors in music room, stair hall and two-story hall are laid in teak wood planks eight inches wide. In the library and dining room teak strips are laid in herring-bone pattern. Single toned Axminster rugs are used in the stair hall, the corridors, the dining room and in some of the bedrooms. Oriental rugs are used in the other rooms. The lighting fixtures have all been especially designed and are examples of the finest workmanship which it is possible to obtain today both in construction and in beauty of finish. The woodwork in the principal rooms gives this same impression, for though it is known that machinery played an important part in the shaping and putting together of the mouldings and panels, yet the surfaces, carvings, etc., have been so carefully finished as to give to the interior an atmosphere such as is possessed by old hand-made rooms. The cabinet work and interior finish, as well as the decorations and furnishings in the principal rooms, were carried out from the Architects' designs by the Hayden Company.



The planting designed and carried out by Wm. Pitkin, Jr., Landscape Architect, adds greatly to the setting without in any way appearing to dominate the architecture. The residence faces upon a broad open lawn framed by large trees and heavy shrub plantations. Its relation to the very fine existing trees was most carefully studied and enough additional ones, from 12 to 20 inches in caliber, were added where required to complete the symmetry of the house setting.

The approach drive, partially screened from the open lawn by planting, sweeps easily toward the house beneath wide spreading elms, and is bordered by fairly strong undergrowth plantations which are sufficiently continuous to keep the interest directly ahead.

The service court is screened from the drive by heavy masses of hemlock, small deciduous trees and high shrubs and this planting will connect with a group of evergreens of considerable size so placed as to form a barrier between the service porch and the house lawn.

The music court is little more than an open panel of turf surrounded by paths and balustrades, a few flowers and an architectural screen along the property line. It appears as an opening in a wood where sunlight and deep shade are strongly contrasted, and it gives an impression of quiet and seclusion. While the interest is local and mainly within the enclosure, one or two good views to the lake are framed and accented as vistas. The relation of the music court to the house is most intimate—it is in fact a part of the house plan. For this reason the planting is of a refined character for close inspection during both summer and winter.

The allee is the connecting link between the music court and the flower garden and passes through a wood of large elms and maples, beneath which an undergrowth planting of rhododendrons, azaleas, hemlocks and white dogwood has been so arranged as to form a well marked vista between the court and the garden, with subordinate by-ways on either side. The whole region is thus given a closed-in, shaded effect occurring very happily between two open sunny areas.

The flower garden is enclosed by a high lilac hedge, is quite simple in design, and is planted with a few reliable varieties of perennials, with the preference given to those having clean, live foliage throughout the seasons.

The rock and wild gardens are given a partially shaded position between existing filberts and nut trees where plants suitable to both sunlight and shade are used in a natural way. To supplement the nut trees several varieties of forest trees are planted as slender saplings to produce the effect of coppice growth. In the partial shade thus obtained, enough shrubbery undergrowth, shady growing herbaceous plants and ferns are introduced to afford protection to tender plants. Into this general ground-work the more interesting varieties of wild flowers are set as near as possible in the manner of their natural growth.

The rose garden is placed in an appropriate and practical relation to the greenhouse, and is enclosed by a heavy planting which serves as a frame for the garden and at the same time as a screen for the greenhouse as viewed from the residence. Its design includes a semi-circular grass panel surrounded by standard rose trees. While the purpose of this panel is primarily to force the screen planting of tall shrubs farther away from the greenhouse, it also makes a pleasing expanse of green to contrast with the great mass of bloom in the rose beds.

The large private lawn between the residence and greenhouse is kept as a simple open central space defined by the bordering features, but connecting directly with the bays each side of the greenhouse. The paths between the several gardens are concealed throughout most of their lengths by the border plantations enclosing this lawn. These plantations, besides giving definite outline to the lawn, also serve to screen the gardens, the greenhouse and the garage.

The small house lawn within the circle of the drive is arranged to give a symmetrical door-yard treatment directly related to the house facade. It is given the effect of an enclosure by planting on all sides except where it opens out beneath the tall trees to the large lawn beyond.

As much of the planting was only completed this summer, the desired effects will not be obtained until the plants have developed more fully.

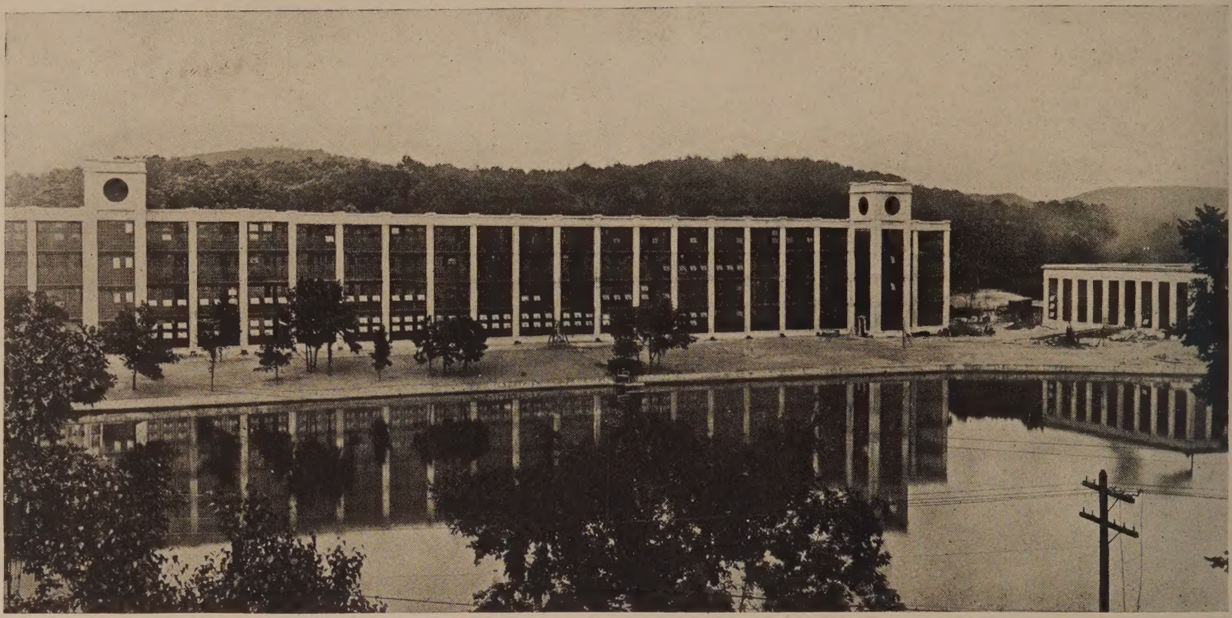
II. The Fenestration of Factory Buildings

By Jerauld Dahler

THERE is no type of building in which windows play such an important part as in factories—both in matter of practical usage, and in regards to design. For a factory building, to be successful, must, first of all, be abundantly lighted. This is an arbitrary fact that dominates all other requirements and, also, that has given to buildings of this kind, a decidedly individual character,—a character, of which, I fear, in times past we have not been inclined or justified to feel proud. I refer here, principally, to the well known style of factory building, prevalent before the introduction of steel skeleton and reinforced concrete construction.

It has been one of the faults of our people, in times past, to devote little or no thought, much less money, to the aesthetic qualities, or development, of factory building design. Such structures have been considered from a purely utilitarian point of view, built for the most part, I believe, without the advice or guiding hand of an Architect. And, as they were built for purely business reasons, cheapness of construction made an appeal to the owner that could not be denied. Being of the simplest construction, their creation could easily be entrusted to anyone with a superficial knowledge of the building trade. As for the appearance of the building, no thought was "wasted" on that. Beauty of design, that exists in relation to all other kinds of buildings, here found no part in the problem. A factory was only a factory, after all; in other words, a necessary evil, stuck off in some undesirable spot of a community that neither cared or dared to protest at the unsightly and unsanitary conditions that rendered such a portion of it an eyesore and a disgrace. Such was the condition of affairs in the not long since past, more or less contemporaneous and a counterpart of the mid-Victorian period—a period now appreciated as infamous for its bad taste, and misdirected energies in matters of art.

It is gratifying that such a condition has passed and is passing; that, in a sense, we have come upon a renaissance; that business minds, of the higher intelligence, have perceived that it is to the benefit of their interests, that their work shops and factories no longer be the disgraces as was



AMERICAN OPTICAL CO., SOUTHBRIDGE, MASS.

formerly the case; that they be not only clean, perfectly lighted and ventilated, and truly healthy spots, where human beings can with self respect carry on their labors, but that these buildings should not be unpleasant to look at, as well; that a sightly appearance is a good business investment, which can be had as easily as not, and hence is in no sense an economic waste. It is good for our civilization that great industrial workers are realizing this. Whether it is the result of their own altruistic desires or whether it is their keen competition with their rivals, is beside the point. It probably could be shown to be both. In any case, the welcome stimulus is present, and is growing rapidly, and in various spheres of our industrial activities. This improved spirit in regards to factory buildings, may, in a sense, be compared to that of a recently widely read advertisement of a certain toilet preparation, in which the manufacturers state that, as it was impossible to improve the product itself, they had improved the box which contained it. Likewise, the factory building may be looked on as the container of the product manufactured within its walls, and the quality and appearance of the building taken as an indication of the excellence of that product. To have an attractive building is to be well advertised.

This idea has progressed even farther than the factory itself, as is shown by the interest now being taken by employers in providing improved living accommodations for their men and their families. Following the successful experiments that have been made in Germany and England, new model village communities are appearing continually throughout the country, as companion to the improved factory. Both are bound to exert an untold benefit and aid in the uplift of what it has been the custom to refer to as the "submerged tenth" of our population, and the time is at hand when these workers can rightfully take their respectful places in our industrial and social life.

Another benefit brought about by this change of attitude of our great manufacturers, is one that is especially pertinent to our profession. To obtain these results, embodied in improved, more efficient, and attractive building, that may serve as a business advertisement, it has been found advisable and necessary to entrust their creation into the hands of a trained specialist, namely, an Architect. The builder who makes his own plans will no longer serve the purpose. This is a strong indication that the layman has taken a big step towards the just recognization of the Architects' uses and talents.

All buildings are primarily utilitarian. That is their raison d'etre. They are built not only for a purpose, but for a distinct purpose, and the better they fulfill the requirements of that purpose, the more successful buildings they will be. Although factory building may be of many and multifarious uses, the most important general requirements common to all, are, unobstructed floor space, as far as this is possible, and maximum light with ample ventilation. The one is as obvious as the other.

Because of these paramount requirements, work-shops as they existed in ages past and before they assumed the gigantic proportions so common to-day, remained out of doors, protected from the weather, if at all, by merely a sheltering hood. That was before the introduction of sheet glass and windows. After these were inaugurated and became cheap enough, glass being at first very prohibitive in price, they were used for work-shops, as well as for residences; and the factory building with its numerous faults as described briefly above, was the result. Of course, in these buildings, as many windows as possible were crowded into each wall. As the size of the window was limited because of its wood construction, and the walls of the building being simple masonry which required a certain area to afford sufficient supporting strength, the facades produced a repetition of voids and solids of about equal width,—at once uninteresting and extremely monotonous. No attempt, as I have said, was made to have them otherwise.

The appearance of steel and reinforced concrete construction has completely changed this state of things, as indeed it must. For the construction of a building, sooner or later, is bound to dominate the design. In most types of buildings, this revolution in construction, brought about by

GRAY TELEPHONE EXCHANGE, HARTFORD, CONN.

the steel column and I-beam, has proven a difficult one to adjust in regard to design, as for instance, our modern "sky-scraper!" Here the Architect has found himself in a good deal of a muddle, because, having educated himself to know thoroughly the forms of architecture of the great past, that knowledge and those forms are his foundation on which he expects to build his own achievements. The loss, over night, as it might be said, of the whole system of construction as he had learned it, and an entirely new and fundamentally different one substituted for it, has not unreasonably produced a more or less chaotic state in the design of "skyscraper" buildings.

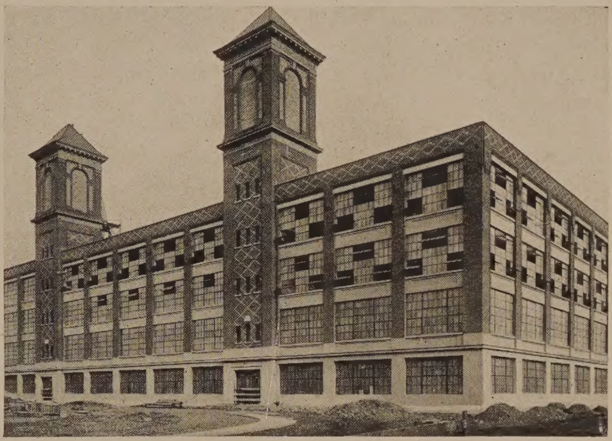
But with factory buildings, this has by no means been the case. In the first place, the ideal factory is located in open unsettled country, or outskirts of some city where land is cheap, and air and sunlight plentiful. Therefore unlike the "skyscraper," which must economize space, they are usually not more than four stories in height. This affords the long, low horizontal lines in the design that we have always been accustomed to in old work, and hence we are more able to handle and appreciate.

The second reason wherein they differ from other kinds of buildings is that they have no past. There are no precedents for buildings of their requirements, to be dug from the remote past, and their immediate past is only worthy of being forgotten. Therefore, their design can be undertaken with a clean conscience and a "carte blanche." One's training need not here work a hardship or be a stumbling block. Taste alone must be the guide and the criterion.

FORD MOTOR CO., PHILADELPHIA, PA.

A glance at the factory buildings of this new type, that have rapidly grown up around us, is convincing proof that their designers have been quick to appreciate the advantages offered by this new form of construction, which by principle, it seems, is ideally suited to factory requirements. Because of the superior strength of steel columns over masonry, the supporting piers may be smaller in volume and wall surface, both of which facts tend to enlarge the space available for the all important light. Also the less frequent occurrence and reduction in size of interior column, and the reduction in the number required, affords an increased percentage of unobstructed floor space.

The development of the steel and concrete factory as we know it today in its high standard of excellence attained, could not be possible except for the successful development of one of its most vital components,—namely, steel window frames and sash. It has been the invention of these windows that has really been the turning point in factory design. Steel columns reduced the wall area that afforded more open space in the wall, but the old style of wood sash and frame were inadequate. Steel frames not only meet the new demands but also add numerous advantages not possessed by wooden ones. They are strong, sightly, durable and fire resisting. It is their strength that is probably the most remarkable. Compared to wood sash, they can be used in much larger units, and form uninterrupted surfaces of glass area to almost any limit. The space between supporting piers, no matter if twenty feet in width, can be spanned as easily and as securely by their light and graceful steel webs, as was possible formerly with wood sash for only about four feet. Also, steel sash may much more easily be manipulated and adjusted, whereas, wood sash are awkward and beset by many limitations, such as expansion from dampness, etc. The ease and convenience of action of steel sash enable the worker to have light and ventilation always under control. It is probable that the dirty, cobwebbed factory of the past was in a great measure due to inabilities in these respects of wood sash.



ALBANY INDUSTRIAL BUILDING, ALBANY, N. Y.

As the ideas governing these steel frames and windows

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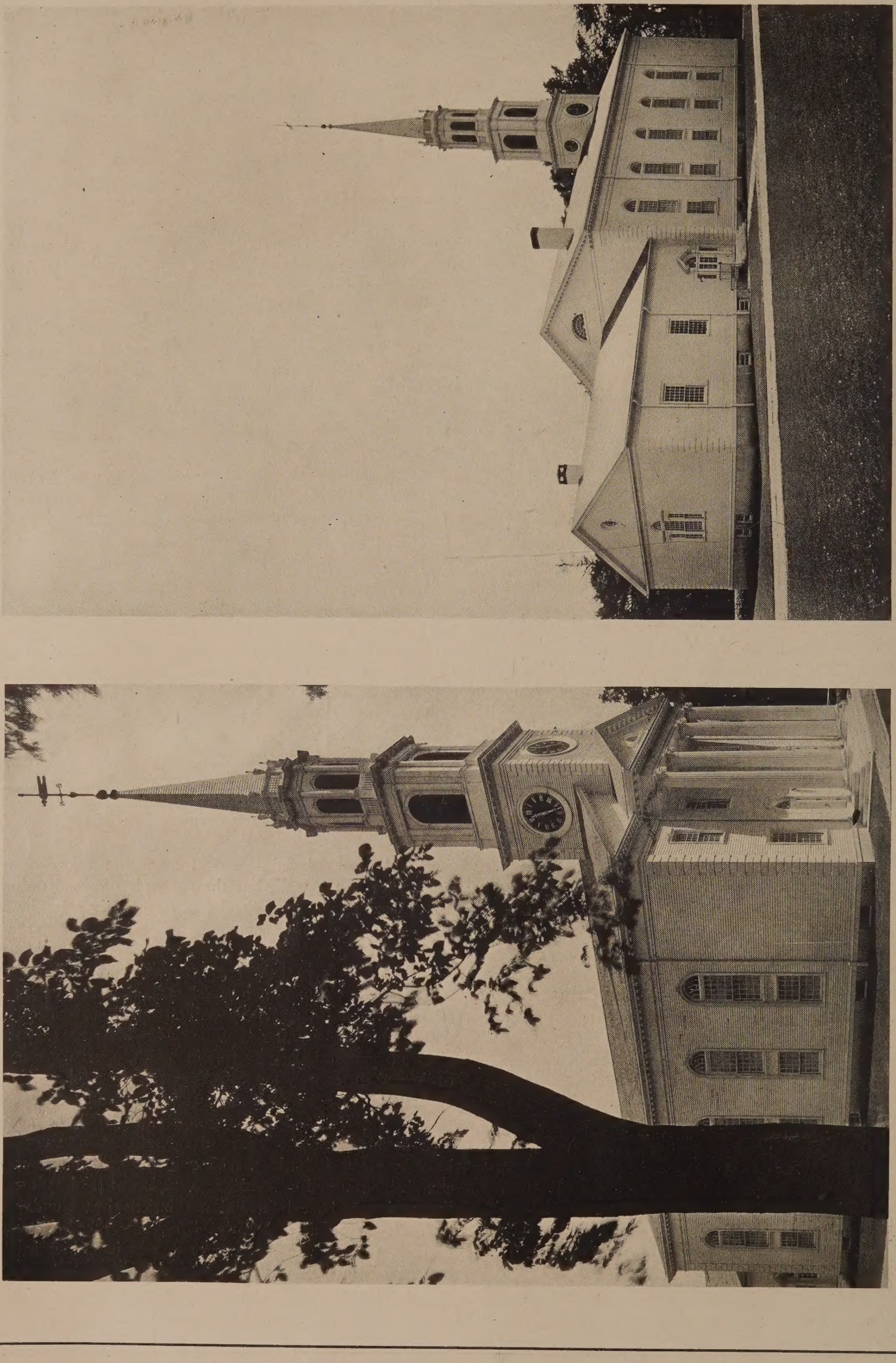

FIRST CONGREGATIONAL CHURCH, WILLIAMSTOWN, MASS.

Charles C. Grant, Architect.

(Continued from page 247)

are patented, there is keen competition in their manufacture, which naturally is a very great factor in attaining and sustaining their high standard of efficiency.

The slender supporting column and broad glass surfaces of a factory building are limitations that must be unconditionally accepted by its designer. The shell of the structure, by necessity, contains a great deal more glass than solid substance. But, while it is this latter which is usually understood by the term "Architecture" its presence in but such a relatively small degree by no means removes this type of building out of the Architect's sphere. These vast flat surfaces of window area interspaced by slender bands of masonry where required by the supporting frame only, are affected by the governing laws of design as truly as is a State Capitol building or a public library. Material and expense are, in a sense, irrelevant. The important idea is that the building be suited in appearance to its purpose and be designed and constructed according to the sense of the proper fitness of things: which is really a sense of proportion. Unless a building presents to the eye the true character of its purpose it is insincere and cannot attain beauty. It would doubtless seem strange to hear a factory building referred to as beautiful. Yet, I cannot see why this should not be possible if it has true character, is simple and well proportioned as to form. There is a certain white marble residence on Riverside Drive that I continually hear passers-by refer to as beautiful, much to my surprise and consternation. To me, it is one of the ugliest houses I can call to mind at this moment. It is pretentious with its lavish display of misplaced ornament and is badly proportioned throughout. So I wonder hopelessly why others call it beautiful. I think it must be because of that white marble and that carving. Yet, white marble of itself has no more claim to the quality of beauty than a common brick or a sack of cement, as far as I can see. A factory building, fashioned of fine stone, profusely carved and moulded would be, it seems to me, decidedly ridiculous and absurd, not beautiful, as the material would be incongruous and inconsistent. Common material only would be suited to its use and the real convincing evidence of its worth as a design would be determined by the excellence of its proportion.

I have reproduced here a few illustrations of modern factory buildings that, I think, are typical examples of recent work. Take for example, the building of the American Asphalt Co. To me this building typifies the best effort exerted in factory construction that has come to my notice. Its design is absolutely simple and straightforward. Nothing useless or superfluous has been "tacked on." Yet, that the design has been thoughtfully considered is evident—witness the presence of the two towers. These, it seems to me, are the result of an especially happy idea. Their presence, though it may seem unnecessary, is amply justified by the fact that the floor space they afford is equally useful with the remainder of the building. In a decorative way they serve admirably to give interest to the design and prevent what would, without their presence, have been a graceful but "flat" facade. As the building is surrounded on all sides by natural scenery, the fact that it in no sense jars, or is felt to be out of place, but rather fits in reposefully, is added proof of its merits. It is an excellent example to illustrate how great is the art of elimination and restraint, and that reasonable limitations in regards to cost are as apt to be a help to the designer as a hindrance.

The important fact, illustrated by this building and others shown (and numerous others not available for publication) is not only the benefit of their own individual merits, but that they mark a welcome step in the progress of this branch of American Architecture; also that facing a problem squarely and courageously and with enduring effort is the quickest way to gain the reward of successful achievement.

Rebuilding of The First Congregational Church of Williamstown, Mass.

Charles C. Grant, Architect

THE congregation was organized by the Proprietors of the town in 1765. The first Meeting House was built in 1768 on the square which is now Field Park. The second Meeting House was built in 1789 on the old site and destroyed by fire in 1866. The third building was erected in 1869 on the present site and was rebuilt 1914, through the generosity of Robert and Elizabeth Cluett.

The old church building, erected nearly a half century ago on the present site, was designed both as a place of worship for the church organization, and as an auditorium for such Williams College functions as might with propriety be held in a church building. Up to the time of the presentation of a handsome auditorium, Grace Hall, to the College, the old church building served its double purpose. After the withdrawal of college functions, the building was much too large for the Society's needs, and it was decided to reconstruct the edifice.

This church structure is situated on the main street of Williamstown, a typical New England thoroughfare, bordered by great elms, and is so surrounded by the campus of Williams College, that its grounds are practically part of it. Many of the college buildings and the dwellings which front on this main street, have been designed after types of colonial days, and it seemed appropriate that the remodeled structure should take the form of an old-time meeting house. This type is also closely connected with the Congregational Church in America, notably the church buildings of the First Congregational Church of Dover, New Hampshire; Old North Church, Portsmouth, New Hampshire; First Congregational Church, Danbury, Connecticut, and the First Congregational Church at Old Lyme, Connecticut. It is to this last that the Architect, Charles C. Grant of New York City, turned for inspiration, and the new spire and portico of the Williamstown Church are very like this excellent example of the old "meetin'-house" type.

After the work of demolition, the foundation, sidewalls, and main floor structure were all that remained of the old building. The accompanying illustrations show a total change in the character of the exterior. They show

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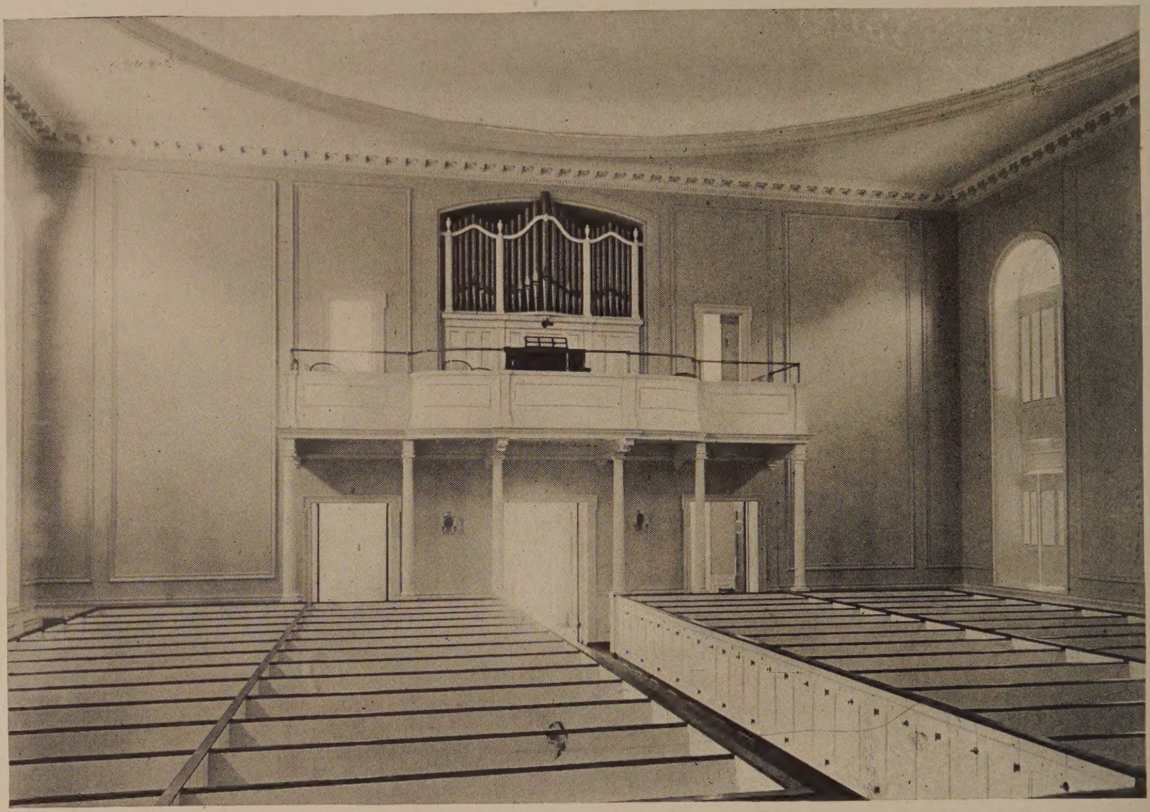
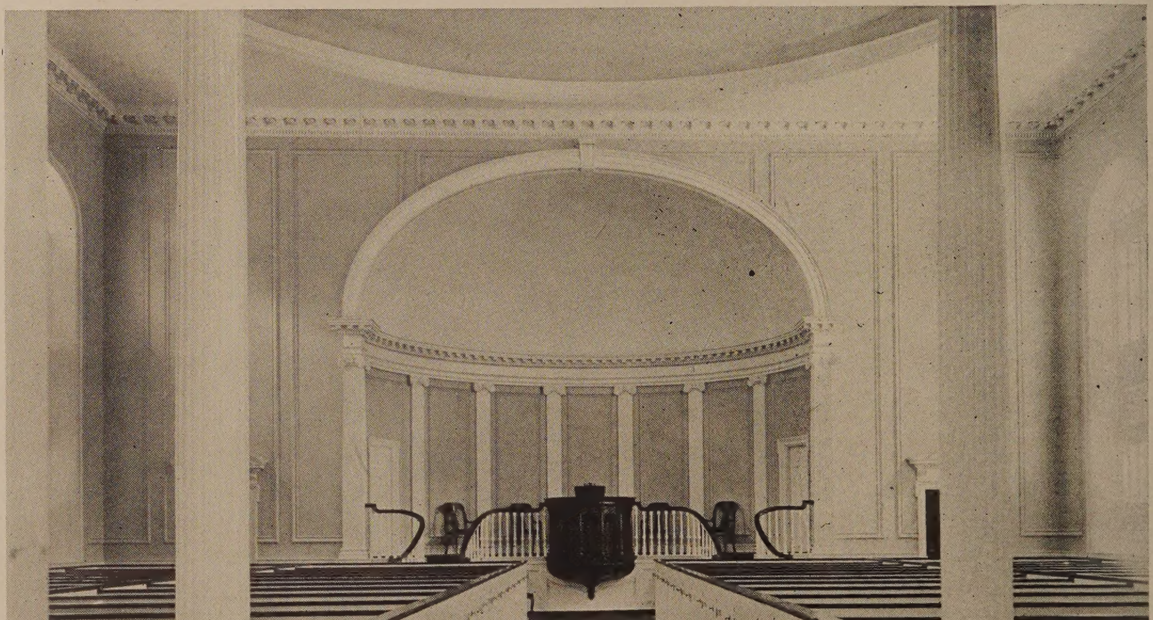




AUDITORIUM, FIRST CONGREGATIONAL CHURCH, WILLIAMSTOWN, MASS. Charles C. Grant, Architect.

(*Continued from page 249*)

the old brick walls covered by white-painted clapboards, the two spires removed and a single slender "steeple," 147 feet in height, erected in the center of the front. This has been constructed over a steel skeleton bolted to a massive foundation to secure it against wind pressure. The bell from the old church has been reset in the new spire, and clock dials, six feet six inches in diameter, appear on three faces, and a smaller dial on rear.

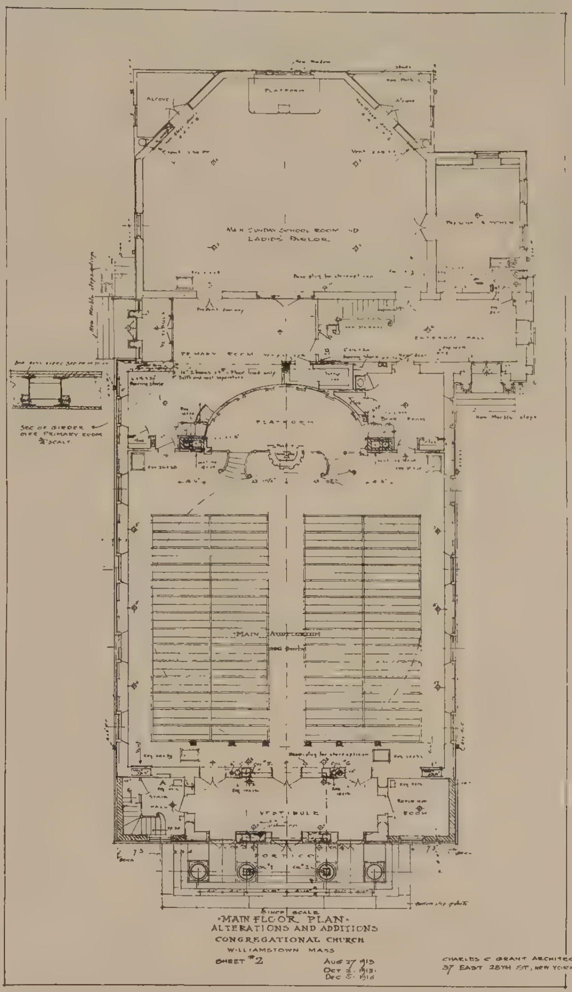
A portico, its pediment supported by four Ionic columns, twenty-six feet in height, has been added, and forms a characteristic feature of this type of building. The portico platform and steps, also platforms and steps at two side entrances to Sunday-School wing, are of white marble.

The main roof has been reconstructed to a lesser pitch, and is covered with mottled green and purple slate.

Three main entrance doorways admit to an ample vestibule, paved with black and white marble in pattern. To the right of this vestibule, as one enters, is a small reception room. Three double doorways lead into the main auditorium. This has been much reduced in size, being now about fifty-four feet square and thirty feet in height. There are no balconies, and therefore no dark and gloomy corners. Seats are provided for three hundred and twelve persons in the old-time high backed pews, each with its paneled doorway. The ceiling is in the form of a flat circular dome, at the base of which, concealed from view, are reflectors of white glass and electric lights, affording a restful reflected light.

The pulpit platform is recessed, and is elliptical in plan. Two ramps of steps, with white balusters and mahogany handrails, lead up to the platform, one on each side of the pulpit. The pulpit itself is of mahogany, very architectural in design, and is perhaps the chief feature of interest in the auditorium.

The organ-loft is at the rear of auditorium, and over the main vestibule. It contains a new, exquisitely toned organ, presented to the society by Mr. and Mrs. George Alfred Cluett, which fact is recorded by a silver tablet attached to the organ. A choir balcony, supported by slender columns, extends into the auditorium in front of the organ. An ample choir room has also been provided.



Much thought has been given to the color treatment. The woodwork generally is white, relieved by mahogany base, pew tops, pulpit, doors and furniture. Plaster paneled walls have been painted a soft warm gray. The ceiling with its elaborate plaster cornice, has been made white. Warm red carpet and pew cushions complete the scheme.

In making over the old into the new, the needs of the Sunday-School and other organizations of the church are well provided for. The main Sunday-School room has been remodeled in an attractive way, and the colonial spirit of the alterations continued. Four new class rooms, a Primary Room, a remodeled kitchen, a pleasant and attractively furnished Ladies' Retiring Room, also a Boy Scouts' Room in the basement, are other features of the reconstruction.

The Planning of the Low-Cost House

A paper read by Walter H. Kilham, Architect, Boston, Mass., before the National House Conference, Minneapolis.

IN approaching the topic of the design of the low-cost house I would like to explain that when I say "low-cost" house I mean a low cost one, or, what is the same thing, a substantial house, not of wood, which can be offered for a rental of fifteen dollars per month or less in a populous city and free from corporation paternalism. Wooden cottages can be, and are, built in small towns for lower rentals, but the real problem is not the habitation for the teacher, clerk or social worker, but for the horny-fisted son of toil, unionized or not, who faces the financial problem of bringing up a large family of children on an income represented by twelve or fifteen dollars per week when times are good, and a large sized minus sign when the work goes slack. This portion of the population needs clean, well-lighted houses, in healthful surroundings and can and will get along without trimmings if the rental can be brought within their needs, provided the neighborhood is large enough to bring a good many families on the same social plane.

Generally the designer of low-cost habitations finds

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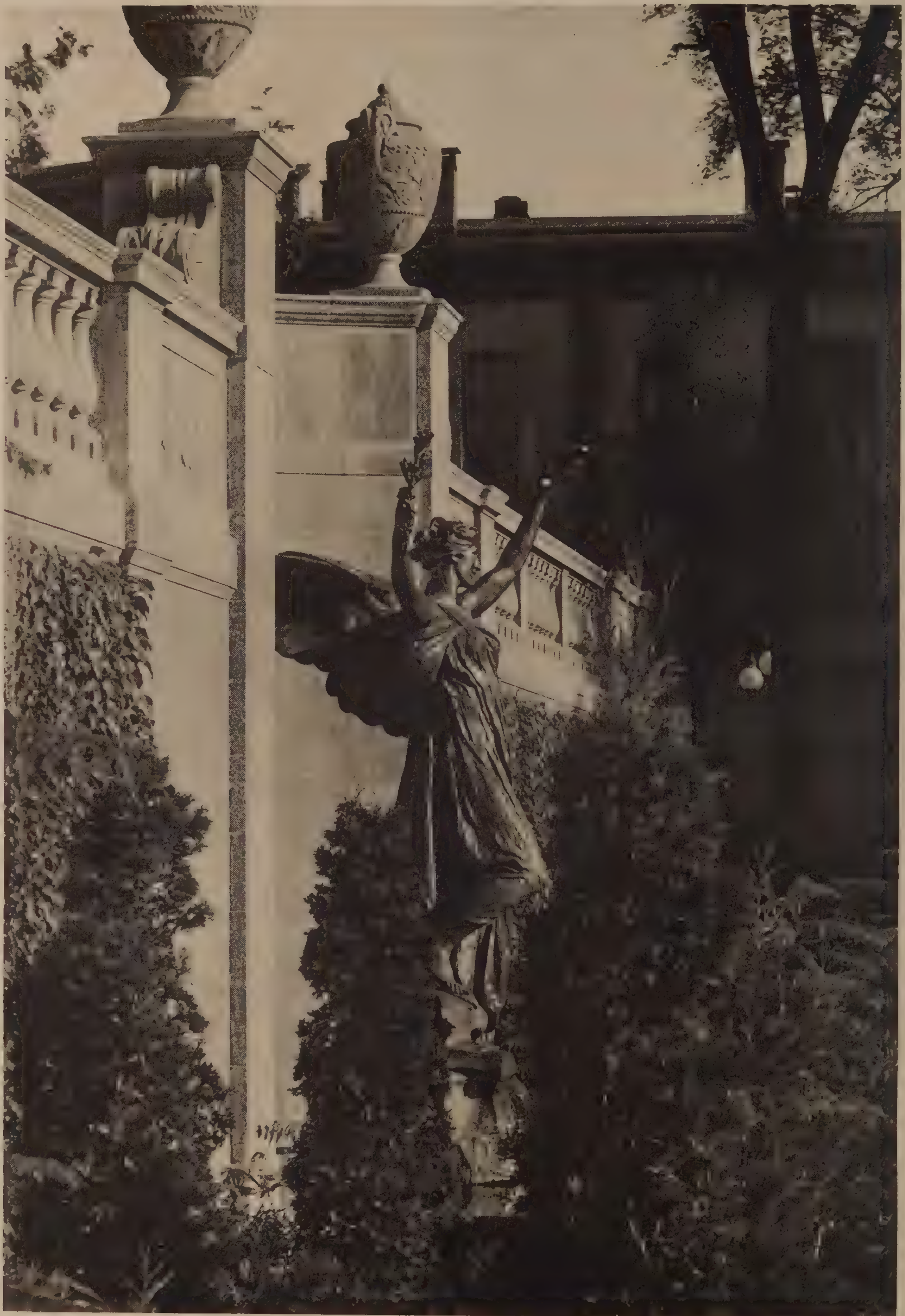

"THE SPIRIT OF LIFE," SPENCER TRASK MEMORIAL, SARATOGA SPRINGS, N. Y.
Daniel C. French, Sculptor. Harry Bacon, Architect.

(*Continued from page 251*)

himself in a dilemma between the ever-increasing demand of the laborer's family for conveniences and comforts, and the contemporaneously increasing cost of building construction. No matter how much the cost of building goes up, the demand of the tenant for larger rooms, more plumbing and other equipment, keeps more than abreast of it. From the standpoint of the Architect, any attempt to solve the question from any such premises as attempting to satisfy every demand of the tenant leads only to an impasse. The laboring man belongs to no privileged class, and like other people, has to go without what he cannot pay for.

The trouble with most housing schemes has generally been that while they always start with the idea of providing simple habitations for working people, the actual result is that by the time they are built the plans have been so improved and enlarged upon that the houses are seized by a class superior to that for whom they were originally intended, who readily pay a little higher rent for the new and cheerful home, while the laborer's family stays on in the old shack which seems to be its only refuge. I have again and again seen houses intended for mechanics and street-car men delightedly taken by teachers, clerks and even doctors, merely because too many improvements were added to the houses by those in charge—fireplaces, furnaces and piazzas are likely to be out of the reach of the laborer and it is useless to consider offering them to him. If we really want to provide houses for this class we must include in the plans only the *fundamentals*, while at the same time we assure to the house a sunny and cheerful exposure, a reasonable amount of yard space and a floor plan which nets the occupant 100% utility, in other words, free from dark or unusable spaces. If we can approach the problem from this standpoint, it is not impossible, given a reasonable land value, to promise the workingman a home in a comfortable and substantial semi-detached house, standing on its own plot of ground, with sunlight around three sides.

The question then arises as to what constitutes "fundamentals." I should say light and air, hot and cold water, facilities for a bath, refrigerator space and as many bed rooms as possible. I should not so class furnaces, piazzas, fireplaces, parlors separate from the kitchen, nor set wash bowls. Like the Swedish servant girl, I should be contented with a "crematory cellar, cemetery plumbing and elastic lights" and omit the "hoosit" or telephone.

In one of our housing projects we designed the house with the bath-room adjacent to the kitchen, so as to reduce the length of piping and to conserve all the heat from the kitchen range for the hot water. To help bring the cost down we omitted the wash bowl in the bath-room, expecting the tenant to use a hand basin in the kitchen sink. A considerable remonstrance arose from some philanthropists over the alleged hardships of this practice, to which we replied that in the building in Boston where our own offices are located, an old mansion which once sheltered Lafayette, we still are compelled to use agate wash basins in soapstone sinks and rather like it. As a matter of fact, the tenants not only never complained, but a waiting list has existed for these houses ever since they were finished.

My own experience in these matters has been limited to a few ventures in the vicinity of Boston, so that I hesitate to lay down dogmatic rules of what should be done in other sections to provide healthful low-cost homes, but I will be glad to speak of a few points learned from personal contact with the problem, leaving Mr. Veiller to explain his reasons for bringing me into a circle of experts so much better prepared than I am to discuss the matter.

It seems to me that a good fundamental proposition in starting a housing project is to have it so designed as to make it possible for a tenant of ordinary industry to easily acquire the ownership of a house, and among this class of people there exists a strong desire to own a building in which one or two tenements can be rented to others, so that the owner is enabled to get his own housing expense down to a very low figure. This desire on the part of the tenants is partly responsible for the "three-decker" evil which has ruined so many suburbs of Boston, and it is highly desirable to provide a better means of meeting this demand.

If the building contains too many tenements, it is naturally too expensive a proposition for the small owner, but a double house offers a type of home not impossible of acquiring.

Of course it is evident that in many cases the value of the land compels the construction of houses in blocks. The interior houses in such blocks evidently cannot get the desired exposure to air and sun, but a double house can have each tenement exposed on three sides, and each can have its own side entrance and path to its back yard without passing the rear of any other tenement. The single house is theoretically, I admit, the ideal type, but I have found that it is slightly more expensive to build, requires more land, and while eagerly sought by renter is much more difficult to sell, and on account of the impossibility of obtaining long horizontal lines is less attractive architecturally.

Plan: In the arrangement of the plan the American temperament and environment must be considered. If we only had a peasant class who were contented to remain so, how easy all this planning would be! The peasant family transplanted to American soil is no longer content to live in the kitchen but demands a dining room and a parlor in addition, for no real reason except that some of their slightly more solvent friends have them. In our Salem experiment we built two types of houses, one having a front sitting room and rear kitchen on the first floor and the chambers and bath upstairs, the other with large combination kitchen, living and dining room at the front of the house with a chamber and bath room opening out of it at the rear and with other chambers upstairs. Although this latter type was seriously questioned before the houses were built, it has been fully as much in demand as the "sitting-room" type and for each type there were three times as many applicants as could be accommodated.

Compactness is an important quality of planning. The plumbing must be reduced to the shortest possible lines and the bath room ought to be either adjoining or directly over the kitchen so as to get the benefit of all the heat for the hot water. As no furnace is supposed for the house, the chimney may well be disposed so as to pass by the wall of the bath room and, in fact, the hot water tank may often be located in it. If there is a probability of half the house passing to a separate ownership the plumbing systems should be kept separate, otherwise money may be saved by running them on the same stack. Sinks should be 33 inches from the floor and supported on brackets instead of legs.

Space for the refrigerator adjoining the back door

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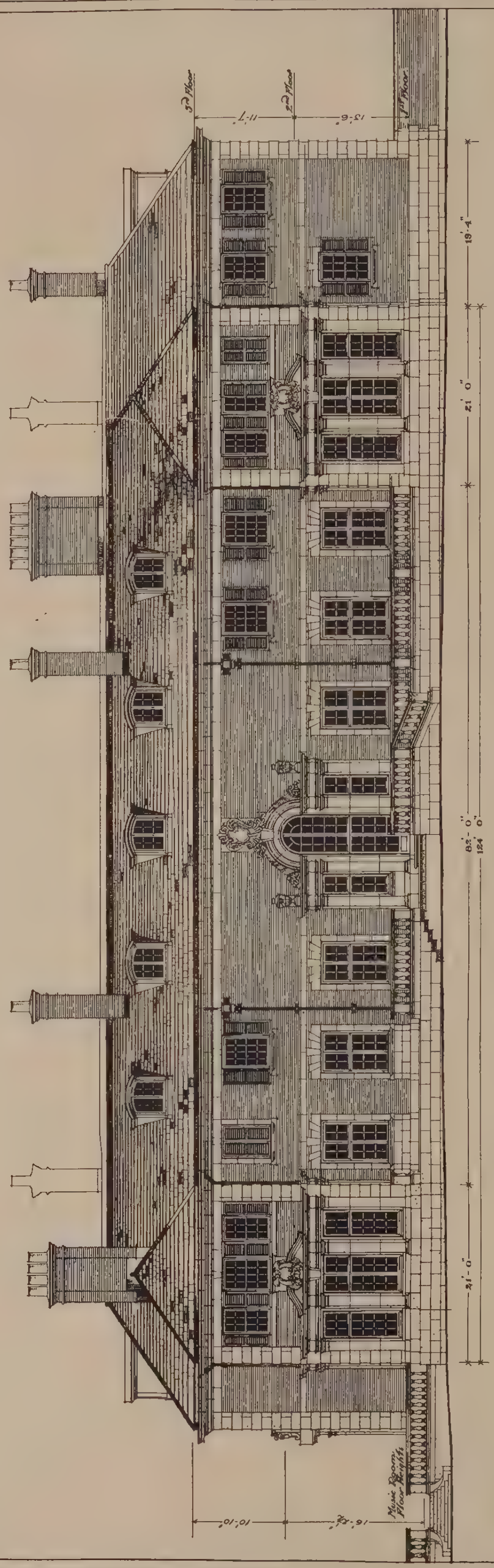


Jefferson Avenue Elevation

Trowbridge and Ackerman Architects
62 West 45th St. New York

HOVSE *for* Mr TRVMAN H. NEWBERRY GROSSE POINTE FARMS, DETROIT MICHIGAN

(Continued from page 253)

should always be provided, with a proper drain, so as to avoid the waste of ice caused by keeping it in the kitchen, and a space for the omnipresent baby carriage found if it is possible, though for the minimum rental, this may not always be possible. Stairs, I think, should lead directly from the front door rather than from the living room, and in a double house, by all means keep the front doors of the two houses separated, as, for sitting out purposes on hot nights, the combination front stoop for two families is a most decided objection. This, however, involves placing the stairs at the end of the building so that the front room cannot have windows on two sides, but on the other hand it implies a well-lighted and airy stairway, a feature which certainly appeals to the imagination.

The cellar should have a direct outside entrance if possible, or at least should be reached without entering the main portion of the house. This is accomplished in some of our houses by making a small side entry, with the refrigerator at one side of the side door and the stairs to the cellar going down on the other side, thus being convenient to both the kitchen and the outside. The cellar should be concreted and have a few shelves, etc.

The kitchen must have accommodations for the simple stock of groceries to be kept on hand, either in a pantry, closet or a cabinet of some sort, and should have painted walls. Laundry tubs may be provided in connection with the kitchen sink. The walls are painted in oil and the floor is oiled. If there is a sitting room, doors or windows must always be of a size to admit a piano for, if not, every tenant will surely possess one. Fireplaces will probably be beyond the cost limit but a shelf like a mantel shelf is sure to be a convenience.

Bedrooms: The subject of bedrooms brings up the question of size. The legal size of 90 square feet for tenement bedrooms seems small to those who had larger rooms in the old houses, but as a plain matter of cost, it is about all that can be provided. Many families are blessed with an abundance of children which creates a demand for numerous, even if small, bedrooms, and in a good number of our houses, at least, we have had no complaint of small room sizes. Windows and doors must of course be so arranged as to provide spaces for the furniture without any waste of room.

Construction: I am firmly of the belief that substantial, even if simple, construction is the most satisfactory in the end. Brick is a durable material, requiring no expense for maintenance and is only slightly more costly than wood or stucco. Slate and copper are cheaper for roofs in the end than shingles and zinc, and the action of local water supplies on metal, in different localities, ought to be considered in writing the plumbing specifications. For the same reason, the floors and interior trim ought to be of hard wood, and the hardware strong and durable. Care must be taken to see that cellars will be tight and dry and a minimum of painted finish should occur on the exteriors.

Houses in Blocks: I feel so convinced of the desirability of the semi-detached type that I have enlarged upon it at the expense of the block type and the "flat type," though, of course, situations will be found where they are more or less obligatory. The objections to building houses in blocks are self-evident and have already been mentioned; only high cost of land or poor transit facilities can excuse such construction.

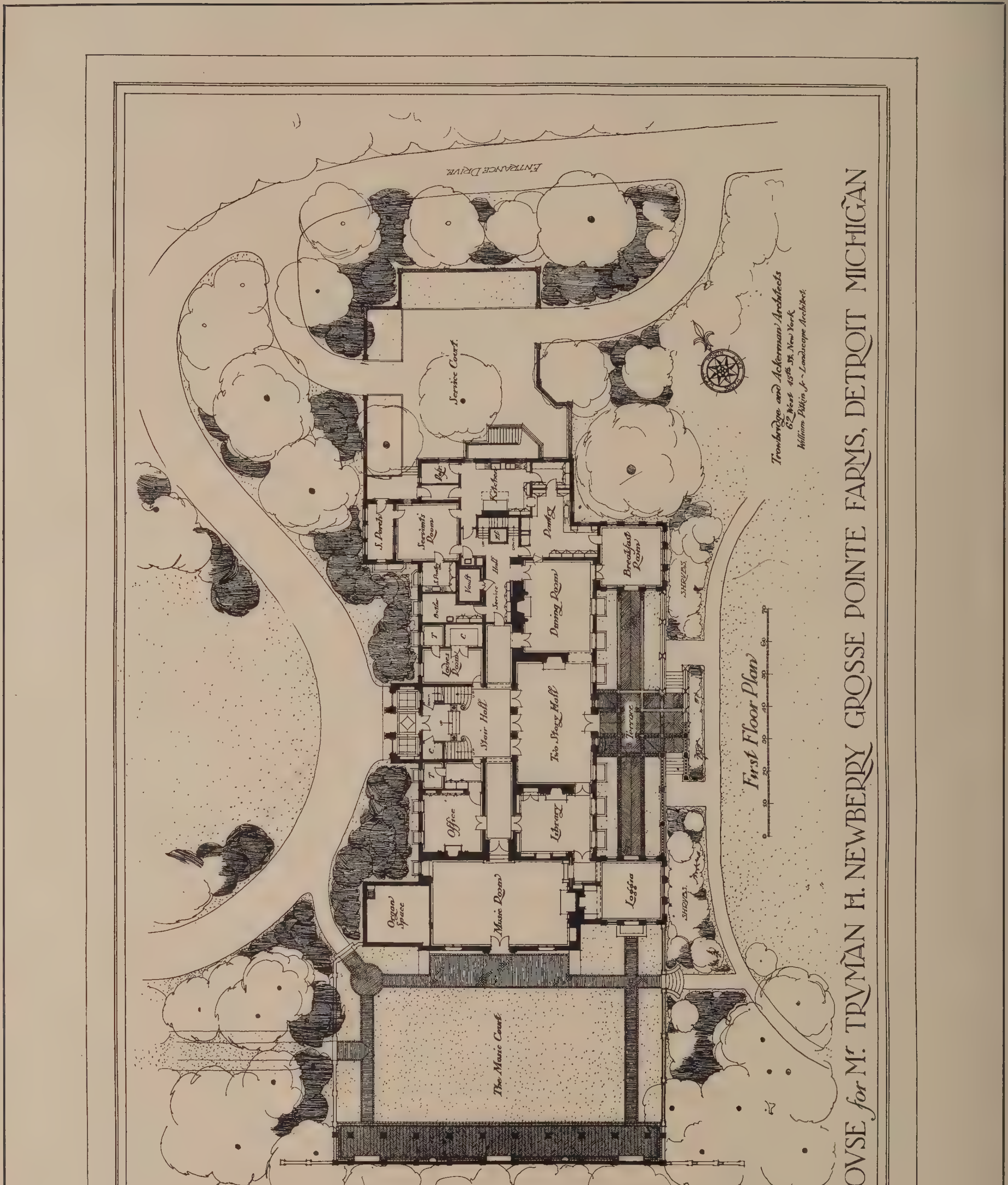
We have developed plans for a type of block of three houses, standing end toward the street, and occupying a plot about 40x80, to meet the famous Boston three-decker on its own ground, but have so far not built any houses from them. This plan provides a fifteen foot space between each block of story and a half gambrel-roofed cottages, say twenty-five feet high, and admits a fair amount of light and air, when you consider that a three-decker is thirty-five feet high and the alleys between are only ten feet wide.

The cost of construction of houses in blocks does not seem to be materially less than in semi-detached form. We have developed plans and taken bids for two-story flat-roofed brick houses in blocks and find that in the vicinity of Boston, for approximately the same sized houses, i. e., about 425 square feet, the cost varies less than one per cent. from the semi-detached gambrel-roof cottage type, which is infinitely more pleasing to the eye, and more convenient for the tenants, so that again, the excuse for building this type must be found in the land situation.

Certainly it seems to me that some attention ought to be paid to the appearance of the settlement and its undoubted effect upon the minds and morals of the inhabitants. The children and wives of the laboring men soon acquire a spirit of civic pride in a settlement of semi-detached cottages which would never appear in a district devoted entirely to blocks, unless they were designed in a manner beyond the laborer's reach.

The objections cited in the case of the "block" houses apply with equal force to the "flat" building, with the added one of destruction of the privacy of the home. The use of the common stairway by the troops of children, the difficulty of watching them from the upper floors and the total absence of any bit of privately controlled land, all condemn the flat as an abode for families with children, and, as I have said above, I am not attempting to deal with the question of homes for bachelors, spinsters, or childless couples; their problem is too easy.

Where conditions absolutely require flats, the plans should be designed so as not to waste too much room in corridors. Chambers and kitchens can open from the common living room without inconvenience to any one and for the low-rent apartment must do so, to keep within the cost limit. While not approving the "flat" system for laborer's families, I must admit that, as an investment, flats show up far better than cottages, and must continue to until people in the cities come to demand living accommodations away from the congested district. The laborer and mechanic work long hours and have to spend a good deal of time in getting to and from their work, a condition which makes it seem desirable for them to live in a central locality. The problem of finding land for them to live on is a proposition apart from the subject of this paper, but I feel that it is a far more important one than the actual planning of the house. What we need is to find here and there tracts of land near to main rapid transit lines, but not necessarily on main thoroughfares, which can be acquired at a price which will enable them to be devoted to cottage development for the laborers and mechanics, the real class which needs help and so rarely gets it.



HOUSE for Mr. TRUMAN H. NEWBERRY GROSSE POINTE FARMS, DETROIT MICHIGAN

Trowbridge and Ackerman Architects
62 West 45th St. New York
William Pitkin Jr. Landscape Architect

Legal Decisions of Interest to the Architect

These decisions appear monthly and are edited by Mr. John Simpson, the well-known lawyer.

DISCREPANCY BETWEEN PLANS AND SPECIFICATIONS.—EXTRAS.

IT was discovered early in the course of the construction of an addition to a building that, according to the specifications, the roof of the addition did not meet the roof of the main building, and it was necessary to make a slight elevation in the new roof to conform to the old at the place where they joined, for which the Trial Court allowed the plaintiff $200 as extra work. The drawings indicated that the roofs joined. The construction of the plans under the contract was left with the Architect. It was provided in the specifications that: "Should there appear any discrepancy between them and the plans, the Architect shall explain them and such explanation shall be final and binding upon the contractor, who will make no charge or claim for extra work in consequence of such explanation, and he shall execute the work in accordance therewith." It was also provided that no extras should be allowed without a written order from the Architect, and if any other work than that shown was required, the Architect must fix the price of it, and the contractor should abide by it. These conditions were binding, and were not waived. The work was not directed as extra work. The Architect claimed it was required by the original contract, and his decision as to the meaning of the plans and specifications was binding. On appeal, the New York Appellate Division held that the allowance should be struck out.—New York State Nat. Bank of Albany *v.* Whitehall Water Power Co., 161 App. Div. 304, 146 N. Y. Supp. 769.

ARCHITECT'S CERTIFICATE.—SUFFICIENCY.

A building contract required the contractor to do the work within a specified time in good workmanlike and substantial manner, to the satisfaction of the owner and under the direction of the Architect, to be testified to by a writing or certificate under his hand, and that final payment should be made on completion of the building to the satisfaction of the owner and the Architect. The building after completion was turned over to the owner and received by him without objection. A few days later he made an objection confined to the concrete basement walls and these were made right. The contractor sent to the Architect a bill for the balance due, and the latter endorsed it "O. K." with his initials. Subsequently he stamped the bill "Approved." There was evidence that the owner knew of the first indorsement by the Architect. In an action on the contract, the Virginia Supreme Court holds that the first indorsement was a sufficient certification of approval by the Architect to sustain an action by the contractor for the balance due.—Scott's Ex'r *v.* Chesterman (Va.) 65 S. E. 502.

ARCHITECT'S AUTHORITY.—CHANGE OF PLANS.

A contract between the owner and builder for the erection of a house, expressly referred to the plans and specifications prepared by the Architect and adopted by the owner, and identified by the signatures of the contracting parties, making them parts of the contract. The drawings showed, by printed words in the spaces representing the corridors, that vitrolite wainscoting was to be used therein, but the specifications made no mention of it. Before bidding for the work, the contractor examined both the drawings and specifications, but was informed by the Architect that vitrolite was not to be used, and that he would erase the words relating to it from the drawings. This, however, he failed to do, and he did not advise the owner of what he had told the contractor. The contractor bid for the work as a whole and did not, in terms, either include or exclude vitrolite. He refused to put it in and completed the building without it. The owner then caused it to be put in and deducted the cost from the amount of the contractor's bid. The contractor thereupon filed a bill in equity, alleging a mistake in the contract and praying for a reformation of it and for a decree for the balance claimed to be due him. The West Virginia Supreme Court holds that the drawings and specifications were both parts of the contract, and were not inconsistent with each other because they both did not show that vitrolite was to be used in the corridors; one supplemented the other.

The Architect is only a special agent, whose authority depends upon the terms of his employment, or upon the terms of the contract between the owner and contractor. He had no authority to change the plans and dispense with vitrolite wainscoting in the corridors without the consent of the owner. The latter was not responsible for the mistaken reliance of the contractor upon the supposed authority of the Architect.

Equity will not reform a contract on the ground of mistake unless the mistake is mutual, or, if not mutual, unless it was known to the other party who has been guilty of inequitable conduct, or unless one party, either by conduct or representations, has caused the other to be misled. Judgment for the defendant was affirmed.—Smith *v.* Board of Education (W. Va.) 85 S. E. 513.

LIABILITY FOR PLANS EXCEEDING COST.—CHURCH AND CHURCH COMMITTEE EXCEEDING AUTHORITY.

A church committee was appointed, with authority to make contracts, but the authority was limited to that of forming plans and building a church to cost not more than $50,000. A contract was entered into with a firm of Architects for preparing the plans and specifications; the compensation to be 3 per cent. on the estimated cost of the building, or $1,500, payable in three equal installments, the first of which was paid. The Architects prepared plans and specifications and delivered them to the committee. In an action against the church and the committee the church defended on the ground that it had given no authority for the construction of a church to cost more than $50,000, and the committee defended on the ground that they made no contract to bind themselves individually, but acted only as agents of the church, and were not personally liable. The

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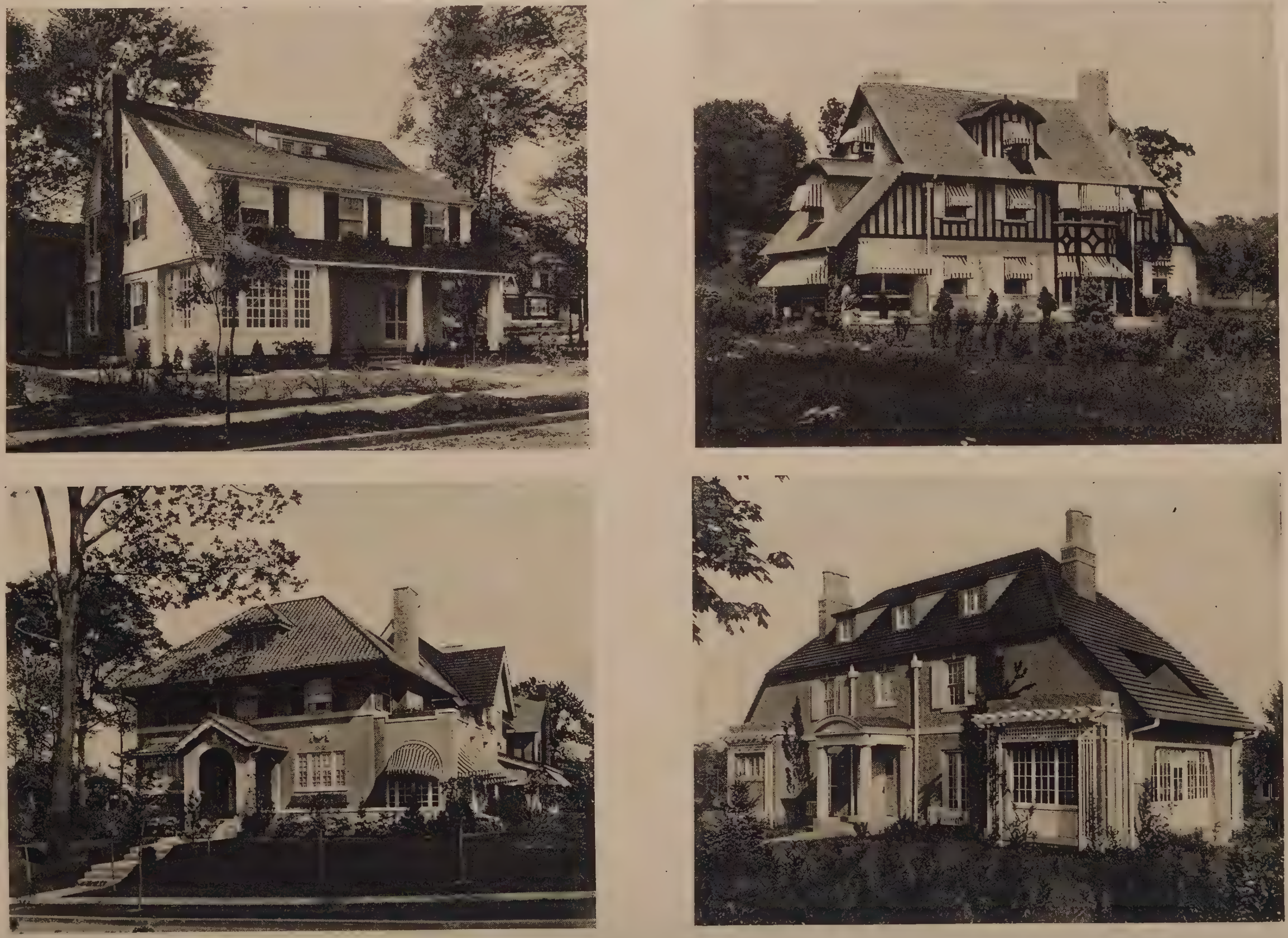


THE ARCHITECT'S SCRAP BOOK—HOUSES ON LONG ISLAND.

(Continued from page 257)

Trial Court held the church not liable, and the members of the committee personally liable. The committee appealed.

The Arkansas Supreme Court holds that the church was not liable, the committee having exceeded its authority. It also holds that the individual members of the building committee, who, with the Architect's knowledge that they were exceeding their authority, contracted in their representative capacity for Architect's plans for a building to cost more than the amount to which they were limited, did not thereby become personally liable on the contract. The church's payment of $500 toward the agreed price, it was held, did not make the members of the committee personally responsible. On the contrary, any such payment by the church, with knowledge of the fact that the authority conferred had been exceeded, constituted ratification which relieved the committee from personal liability by reason of having exceeded their authority, even without the Architect's knowledge. This resulted from the fact that a principal and agent cannot both be liable on a contract; if the principal is liable, the agent is not. Swearingen *v.* C. W. Bulger & Son (Ark.) 167 S. W. 328.

Violation of Building Line Restriction.

Great difficulty has often been experienced in determining just what constitutes a violation of a building line restriction, and what portions of a building may extend over the line without violating the restriction. Each case necessarily presents its own problems, and as a result it is difficult to ascertain or lay down any rule that will be an absolute guide for every case. In a recent case to enforce a prohibition in a deed from erecting any building within 15 feet of the front line of a lot in the city of Chicago, the defendant proposed to erect a porch three stories in height (the height of the entire building), with brick and stone pillars 20 inches square, solid brick balustrades at each story, and brick buttresses to the steps, coming to within 10 feet 10 inches of the street line, and all extending beyond the building line established in all the deeds to lots in the subdivision. The Court reviewed the prior Illinois cases on the subject. In Curtis *v.* Rubin, 244 Ill. 88, 91 N. E. 84, the Court held that swell fronts or bays which extend over the established building line and run up the whole height of the building from the basement to the roof, and which are on a continuous foundation with the building, with continuous walls of the same material, are substantial parts of the same building, and their erection is a breach of the building line restriction. In Hawes *v.* Favor, 161 Ill. 440, 43 N. E. 1076, it was contended that the building line restriction had been violated by the building of an open porch over the line. The Court held under the facts in that case, applying the rule that if there is any doubt as to whether the porch is within the terms of the building restriction the doubt must be resolved in favor of the grantee, that the open porch which had there been constructed was not a violation of the building line restriction.

One purpose in establishing a building line is to insure a certain degree of uniformity in the appearance of the buildings erected on the property where such line has been established. The establishment of a building line also creates an easement of unobstructed light, air, and vision for the benefit of the public and for the benefit of the owners upon whose property the restricted area is laid out. Ewertsen *v.* Gerstenberg, 186 Ill. 344, 57 N. E. 1051, 51 L. R. A. 310; Simpson *v.* Mikkelsen, 196 Ill. 575, 63 N. E. 1036. The purpose of establishing a building line, it was held, would be entirely defeated if the owners of lots should be permitted to erect such structures within the restricted area as that which the defendant was erecting on her lot. It is true that all doubts must be resolved in favor of natural rights and against restrictions (Hutchinson *v.* Ulrich, 145 Ill. 336, 34 N. E. 536, 21 L. K. A. 391; Ewertsen *v.* Gerstenberg, supra), but in this case no such doubt was held to exist as in Hawes *v.* Favor, supra. The mere fact that this structure was called a porch did not bring it within the holding in the Hawes case. It was held that the structure was a violation of the building line restriction.—O'Gallagher *v.* Lockhart (Ill.), 105 N. E. 295.

Acceptance of Work by Architect.

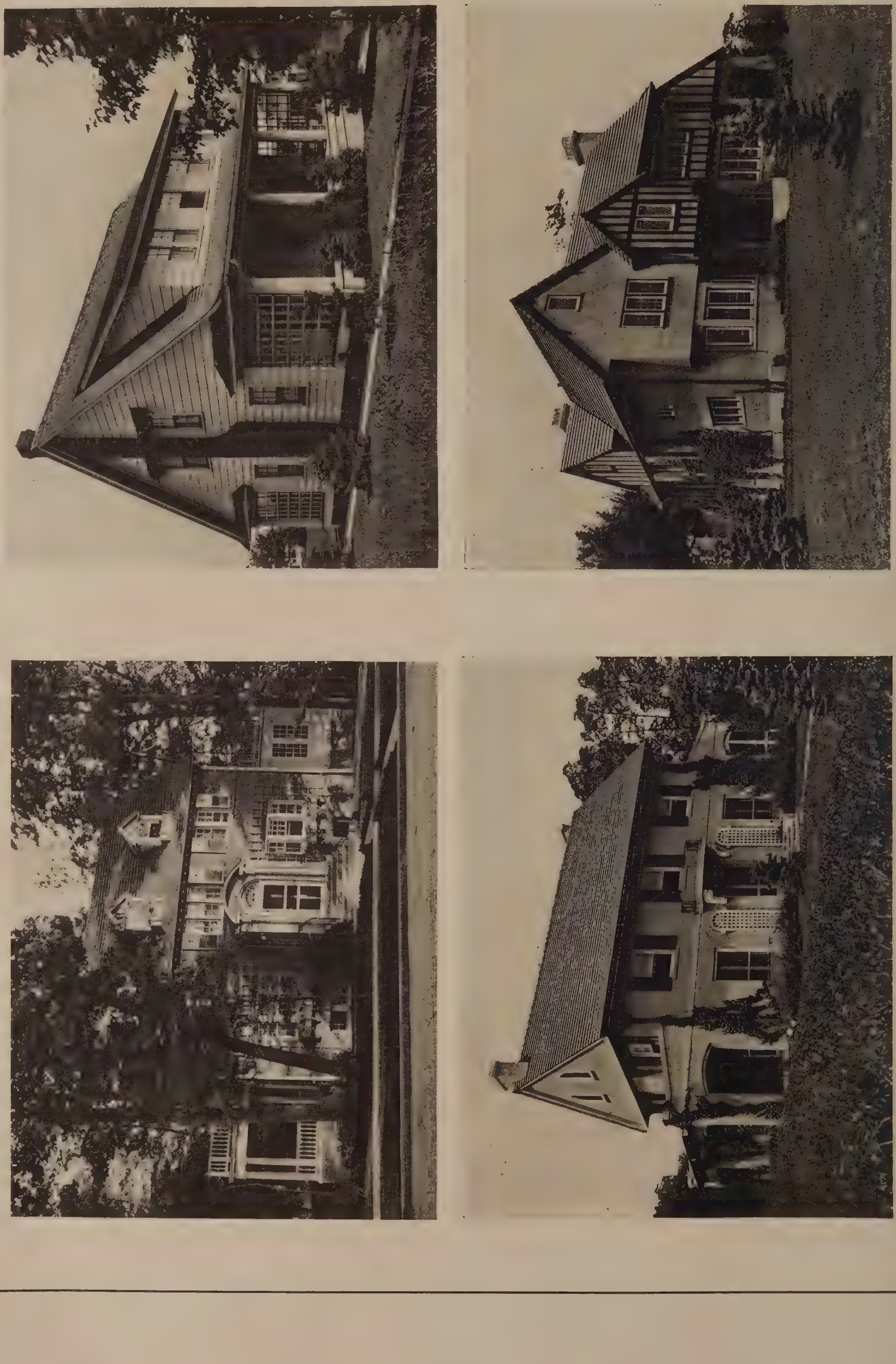
The Washington Supreme Court holds that the State Board of Control might authorize the Architect on a State building to determine whether it conformed to the plans, and to accept the work. Where the board constituted the Architect its agent while acting within the powers conferred, the Architect's acceptance of the building was the act of the board.—McGowan Bros. Hardware Co. *v.* Fidelity & D. Co. (Wash.), 147 Pac. 44. The Court followed Union Iron Works *v.* Strauser (Wash.), 143 Pac. 446, where it was said that the law appears to be that where the body acting for the State, county municipality, or other public body, has been given power by statute or charter to contract for public buildings or improvements, such body, acting for the State or other public body, in the absence of a limitation which forbids such delegation, may delegate to an Architect, engineer, or other proper person, the right to determine when the work contracted for conforms to the specifications, and to accept the work. This is not an attempted delegation of the right to exercise the judgment or discretion vested in a body acting for the public, but is a delegation of the right to determine a fact.

Inclusion of Underpinning in Contract.

A building contract required the contractor to furnish all materials and labor of every description for the performance of the work and lay out his work and be responsible for its correctness, and provided that any dispute as to the construction of the specifications should be determined by the Architect, whose decision should be final. A question as to whose duty it was to underpin the wall of a building while excavation for the foundation was being done was submitted to the Architect, who decided that it was the duty of the contractor so to do. The Virginia Supreme Court, in an action on the contract, holds that evidence that custom did not include underpinning in the contract was inadmissible, in the absence of proof that the owner or Architect knew of the custom, or that the Architect was guilty of fraud.—Scott's Ex'r *v.* Chesterman (Va.), 85 S. E. 502.

Necessity for Architect's Certificate.

The Washington Supreme Court holds that the dismissal of a contractor's action for compensation because he has not obtained, or shown excuse for not obtaining, the Architect's certificate, made a condition to the right to payment, should be "without prejudice." To dismiss it "with prejudice" would be susceptible of construction as a final adjudication of his right to compensation, regardless of his future obtaining of the certificate.—Lindblom *v.* Mayar (Wash.), 142 Pac. 695.



THE ARCHITECT'S SCRAP BOOK—HOUSES ON LONG ISLAND.

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Entrance Front, - - - - - - Plate CXIII
Lawn Front Facing Lake, - - - - - Plate CXIV
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Editorial

The Office Boy—Standard Molding—The Modern Architect

THE office boy in the Architect's office gets a salary of about $5.00 a week, runs errands, traces drawings, tends door and makes himself generally and miscellaneously useful or frightful, as the case may be.

The office boy in every office is a great deal of a problem; it is certainly hard to expect a fourteen or fifteen year old youngster, full of life and the devil, to be transformed as his foot crosses the threshold of the office in which he works, into a respectful, efficient and intelligent assistant. Yet such a transformation is essential, for the boy's function is much more important than it is generally supposed to be. It is in a way the lowest position in the office, and yet it would not be a great surprise to learn that the type of office boy employed by an Architect might much more influence the business of his office than the type of draughtsman.

Draughtsmen do not often see the clients; the office boy generally sees them before the Architect does, and if he is rude or inattentive or stupid, he may be the only person in the office that ever does see them. He must, with an unerring eye, pick out the prospective client from the numerous gentlemanly manufacturers' agents who call on the Architect, and see that this prospective client gets an immediate audience with his magnificent boss. He is the one who takes the sketches up to the client, and often he is called upon to explain to the client what they are about, unofficially of course, but the client expects superhuman knowledge of all the employees in an Architect's office.

There is one other thing that the office boy occasionally does, and which well done may be of great value to his employer, or, if not tactfully done, may do him a very serious dis-service; that is the giving out of information regarding the work of the office. There is a historical case of an office boy who was asked a lot of questions by a reporter concerning the new State Capitol in a Western State; the reporter's paper was one of the most active in the party of opposition, and the office boy's answers gave the people of that State food for considerable thought. Of course the office boy thought it was a great joke to tell the reporter all about it, and while most of the answers that he gave have been forgotten by the writer, there were two which resulted in very considerable embarrassment for the Architect. One was his statement that the entire building was to be constructed of the finest white Italian marble, imported from the Grecian Islands, and the other was that the lantern was to be surmounted by a ball of solid gold eight feet in diameter, and one inch thick, the material being selected so that it would not be subject to disintegration by the elements, and so that it would also act as a lightning arrestor. These two statements, so obviously absurd, were actually made part of the testimony of the legislative inquiry into the Architect's conduct of his business, and the office boy was punished by being demoted from his high state and made into a very excellent draughtsman, a position where he could cause no embarrassment to his employer.

The Architect generally knows what his draughtsmen are doing, but it is an even money bet that he does not know what the office boy is doing half the time.

The office boy is hired and he is expected immediately to know how to make a stretch, he is supposed to know the addresses of anybody that has ever come into the office or may possibly come in, he must know how to do up packages neatly, and know how to route packages through the correct express companies, and he must understand the zone system of the parcels post. He is often not told any of these things, for there generally is not anybody in the office who knows them, and the surprising thing is not that we weep about our office boys, but that we manage to keep business in spite of them; or, to put it more truly, in spite of our lack of attention to them.

The office boy must be honest, well dressed, attentive and intelligent; he must get to the office before anybody else, and must be ready to go to the blue printers after everybody else has gone, and the funny part of it is that he generally does all these things and does them very well.

We admire the draughtsman, but we certainly take our hat off to the office boy.

IN considering the great advance which architecture has made in this country in the past few years, we are too apt to forget that this advance has been for the most part confined to the larger and more important buildings. Our Architects are indubitably improving, the individual members and the general average of the profession as well, but in considering the strides which design has made, we are too apt to think of the advances which have been made in the design of public buildings, in ecclesiastical work and in the country houses designed by the better men in the profession. If we compare the pages of any architectural magazine published this month, with the illustrations of work which was published fifteen years ago, the improvement is perfectly evident, and we are apt to think that the art has advanced in its entirety in the same degree as have the selected examples.

This is probably very far from being the case. Many factories are still built without much thought to their appearance, and with an eye only to their convenience; the apartment houses, which constitute such a tremendous proportion both in value and area of our city buildings, are still designed, for the most part, by contractors who pose as Architects, or by Architects whose chief claim to recognition is that they are able to get plans through the Building Departments; and in the country the vast majority of our buildings are still in a very low state of development.

It is probable that the advance in taste on the part of the recognized leaders of the profession has been reflected back upon the general taste of the country, and that in course of time we may hope to see all of our work improved to a very marked degree. But that there is any such tendency is not yet apparent, and its probable existence is a matter of speculation. When we compare the average of the work done at the present day with the average of Colonial times the difference is extraordinary; of course this "average" does not mean the average of work selected for publication by the magazines, but the average of all the work actually constructed throughout the country, and the difference between the average as at present, and that of Colonial times is so marked that we will find the best of modern houses hardly surpassing the medium or the poor of the Colonial period. The carpenter-designed houses of the present are beneath comparison.

Now there must be some reason for this manifest inability on the part of the carpenter of to-day to design as well as did the carpenter of one hundred years ago, and if we could find the reason we might be able also to find a remedy. Probably the main difficulty is in the question of precedent; the Colonial builder had no bad examples to copy, and as architecture is essentially an imitative art, he was not able to construct from his own imagination the atrocities which to-day disfigure our country side. His bad taste was afforded no outlet. On the other hand, the carpenter of to-day who designs the $3,000 or $5,000 workman's cottage has a multitude of very bad examples around him (and probably no good ones), unless he happens to live in one of the States where a few examples of the old work still exist. Even these are seldom copied by the carpenter, because the methods of construction employed in them are widely different from those current at the present time, and they are probably tumbling to pieces, unpainted and shabby, and a general lack of smartness disguises their real merit. The only remedy for this attitude of mind on the part of the carpenter-designer, or the small country Architect, is a campaign of education as to what constitutes sound architecture, and this campaign is being conducted very vigorously and intelligently by all the publications which have to do with architecture.

There are three classes of publications which are actively engaged in the work; the first being the technical publications of the type of this one; the second, the semi-popular architectural magazines, such as "Country Life," "House and Garden," and "The House Beautiful"; the third being the house organs of the various large manufacturers. It is rather a curious and encouraging symptom of the condition of affairs in this country to-day that, not infrequently, these house organs show more intelligence in the selection of subjects than do architectural magazines, supposedly their superiors. This campaign will result in a general elimination of useless ornament, confused plan, aggressive proturberances and bad color, so that the general run of American architecture may become simple, tasteful and good in form; but no campaign of education can bring us back to the universal excellence of detail of the Colonial period, unless the materials which the carpenter has to buy ready made for his houses are themselves of good quality.

Fortunately, in one very important direction the manufacturers are wide awake to their responsibilities. For one we refer to the brick making industries; the shiny, smooth, paint-like surface, twenty years ago considered the last word in brick, has been pretty well driven out of the market, and probably as much through the appreciation of good brick work on the part of the manufacturers themselves as through the efforts of the Architects. It is also a pleasure to note that the manufacturers of those very important elements in country house design, the column and the pilaster, are habitually making stock patterns of unquestioned excellence. Their stock patterns do not have in all cases the appropriateness to their positions which columns designed to fit those positions might have, but on the whole they are excellently proportioned, and well detailed. But after these stock columns are put in place on the piazzas and porches of the cheap country house, the carpenter is left largely to his own devices in the matter of entablature, and he selects from a standard molding book, or from the lumber yard which carries standard forms of molding, those which happen to please his fancy, and builds up some sort of an entablature from them which is generally very bad indeed.

Now he may be a man of very poor judgment in the selection of detail, but it may be doubted that if he were Pheidias and McKim rolled into one, he could make a good entablature from standard moldings. There are practically no good standard moldings manufactured, and yet there is no one feature of the house so all important as this. Our Colonial ancestors undoubtedly put their houses together in most cases from stock moldings; we have in New York block after block in Greenwich Village, and the lower east side, where the doorways and cornices, the interior and exterior trim, and the moldings throughout the buildings were the same, assembled, it is true, in different combinations, but assemblages of what were in most cases stock moldings, and the houses have a grace and finesse which would be impossible to secure by any combination of the stock moldings obtainable in the average lumber yard to-day.

This is a condition which ought to be remedied, and the question of how to go about it appears to be a very difficult one. The standard moldings now obtainable are those which were adapted a number of years ago by certain associated manufacturers, and as new mills have sprung up they have been equipped to turn out similar moldings. If all the moldings in the country were made by a few concerns, or made in mills controlled by a few concerns, it might be possible to persuade them to scrap certain of the profiles and substitute for them others of better architectural quality, but the mill business is a veritable hydra, and as fast as one of the heads is knocked off, another springs up to take its place.

The standard molding book shows several thousand patterns, composed of all sorts of members, listed as suitable to every part of the house from water table to corona, and with very few exceptions they are equally bad, and it would be only a herculean feat to induce the manufacturers of moldings to substitute for their poor moldings better ones, but it seems almost impossible to suggest a suitable method for deciding what moldings should be used. We have no way of knowing how the mills in Colonial times obtained the designs for their moldings; we only know that the moldings themselves are very good, but we cannot suggest simply a return to the moldings of Colonial times, since design as a whole is now somewhat different in character and scale from that of Colonial times; therefore it is very doubtful if the old moldings would be suitable to the manifold uses of the stock moldings of to-day.

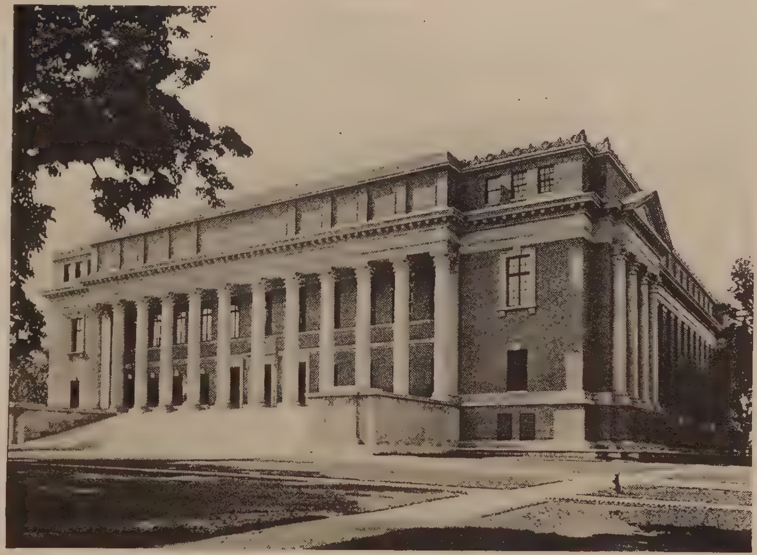
Unquestionably, however, something ought to be done about the standard moldings; probably all Architects are agreed on this point, and the question is simply how to go about it. In the first place the number of moldings called "standard" could be much reduced; in place of the two hundred odd one-piece door and window casings or "architraves" now given, a dozen or fifteen would serve all useful purposes, together with three or four two or three piece casings, and in place of the one hundred odd crown moldings, a quarter the number would suffice. The other moldings might be reduced in like proportion, and the task of the lumber dealer who endeavors to keep a full supply of stock moldings on his shelves would be much lighter, while the carpenters who go to the yard to get the detail for the houses they are building would have their taste automatically improved. It is unfortunate that there is in the United States no organization which seems to feel that it is its particular function to assist in the improvement of this sort of design.

"THE truly successful modern Architect must of necessity be an artist, a scientist, and a commercialist"—three very distinct and to all experience irreconcilable qualifications. And yet this combination of talents is actually found in many successful leaders of the profession. Of course, it does not mean that an Architect is expected to be a master in each of these arts, but that his character of mind should be comprehensive enough to be able to perceive the demands made by each of these three things. If art is considered as sentiment (it is something more than that), science may be considered a mind capable of investigating facts and drawing conclusions therefrom—a mathematical mind, and commercialism is another name for business methods. In the absence of a more precise description of what a successful Architect now requires, we may take this as a fairly good one, as it sums up three important sides of an Architect's mental equipment for his work.

THE New York Society of Architects has just issued from the press its official year book for 1915 containing a vast fund of information of special interest to the Architects, contractors and builders, not only in and about Greater New York but throughout the entire country. The idea has been to make the publication an authoritative handbook containing information which is required in the daily routine of an Architect's office. It has therefore been arranged in such a manner as to constitute an excellent reference book of architecture and related subjects and in the present issue the endeavor of the committee has been to assemble all the laws relating to building and construction in the various boroughs of the greater city. The provisions relating to building has been compiled from the State laws, city ordinances and the rules and regulations of a number of State and municipal departments.

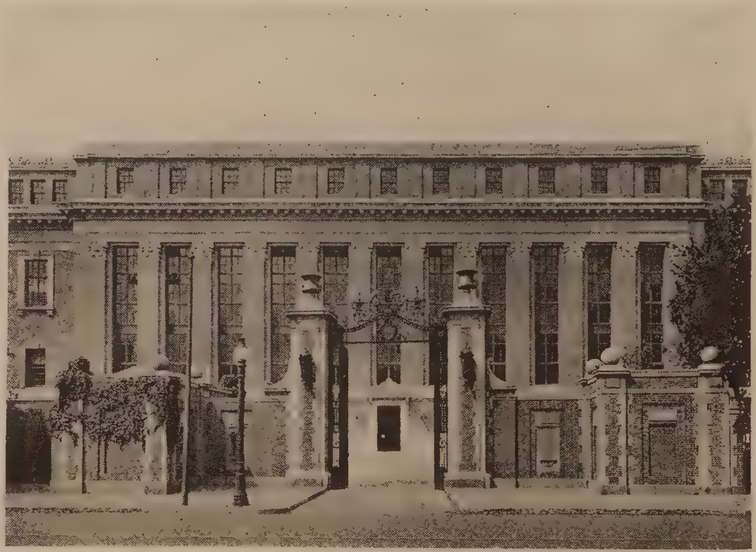
Much that is of value to the builder as well as to the Architect are the provisions such as the State law regulating plumbing, the State labor law in regard to factories; the State excise law relating to the construction of hotels; the sanitary code of the health department, affecting the construction of buildings; the municipal explosives commission in regard to blasting; the regulations of the fire department in relation to standpipes in fireproof buildings; garage regulations; ordinances regulating courtyards; the rules and regulations of the bureau of buildings of the tenement house department, as well as the laws concerning factories and bakeries. The Architect frequently has to refer to each separate enactment for necessary information required in his practice and the shape in which the matter is arranged within the covers of the work under review cannot fail to meet the exacting requirements of the profession.

Brickbuilder.



Harvard Yard Facade, Harry Elkins Widener Memorial Library, Harvard University.
Horace Trumbauer, Architect.

Brickbuilder.



Mass. Ave. Facade Harry Elkins Widener Memorial Library, Harvard University.
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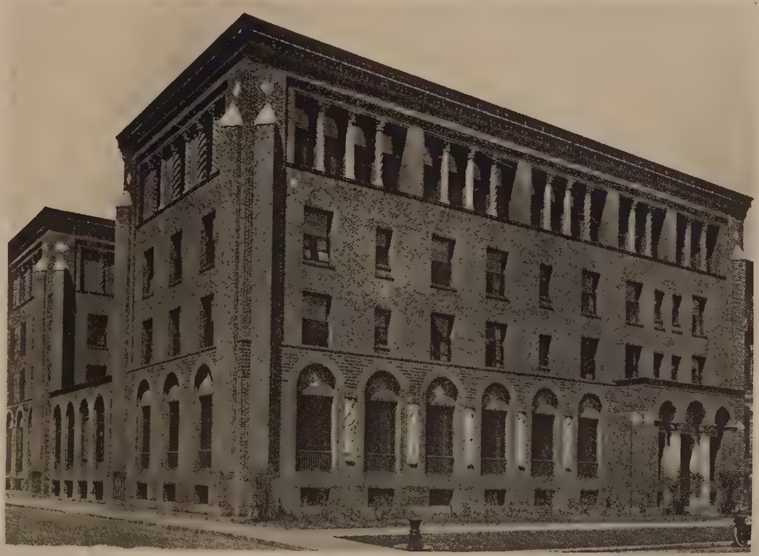

Three Arts Club, Chicago. Holabird & Roche, Architects.

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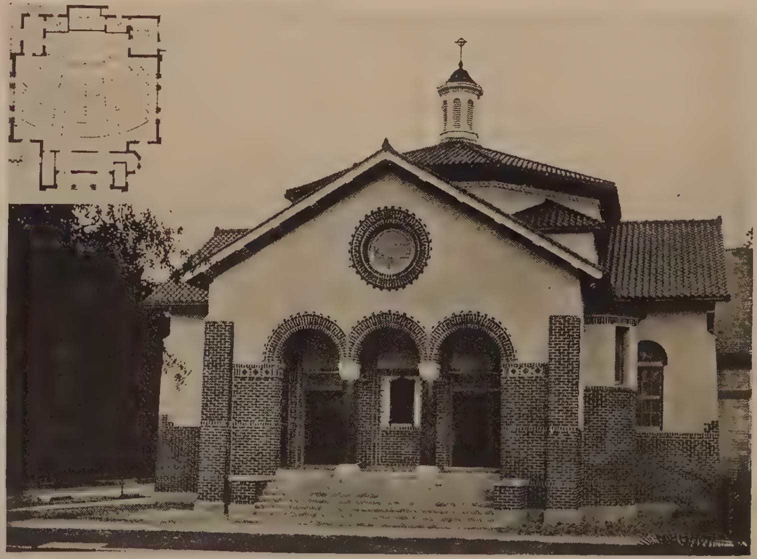

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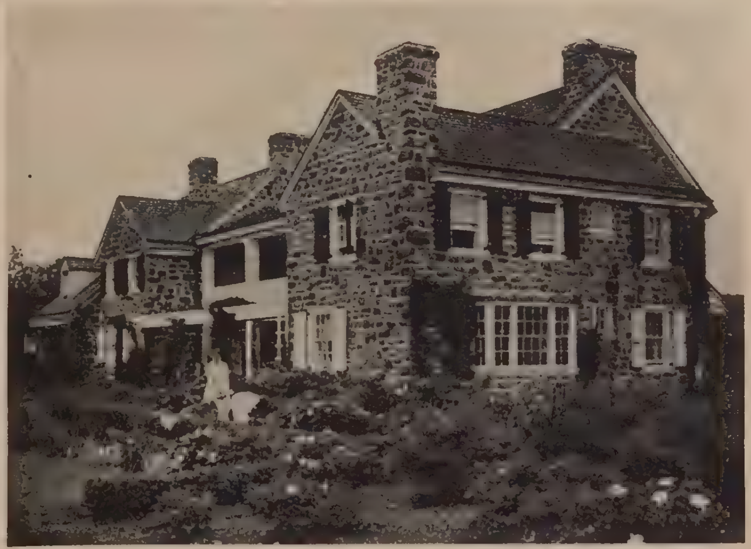
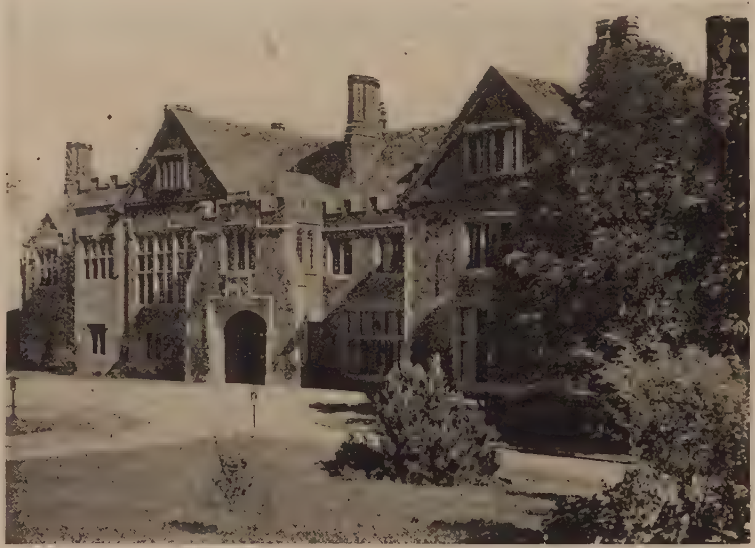


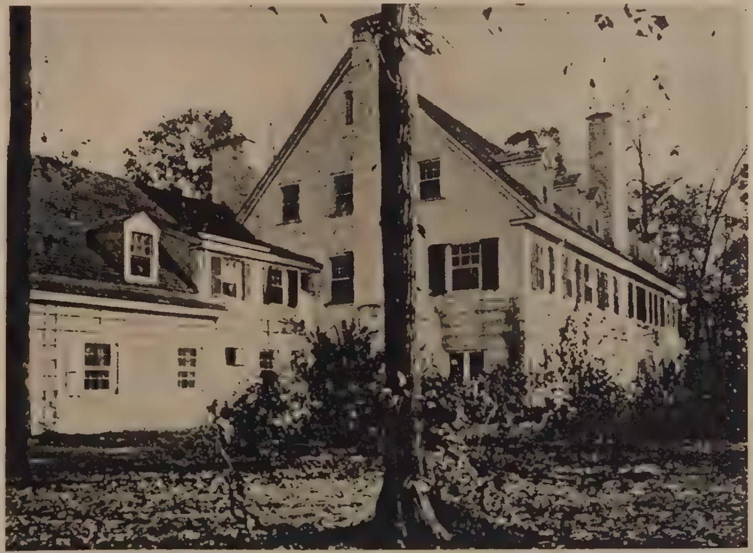
Residence, W. T. Harris, Villa Nova, Pa. Duhring, Okie & Ziegler, Architects.

Architectural Record.



Residence, Stuart Duncan, Newport, R. I. John Russell Pope, Architect.

American Architect.



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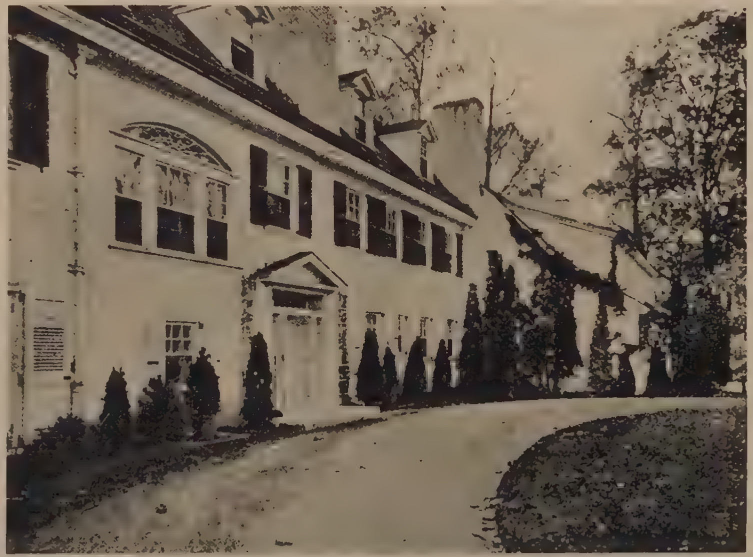

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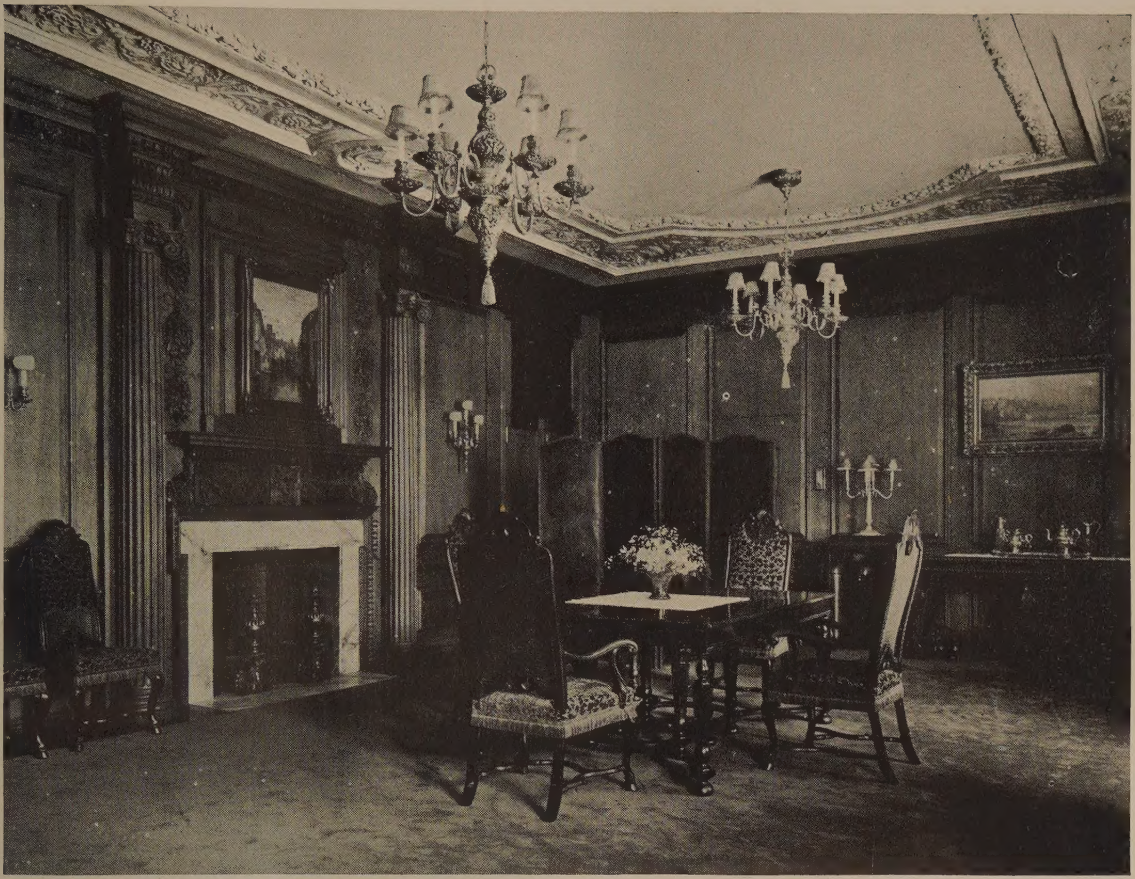

Dining Room, Residence, Hon. Truman H. Newberry. **Trowbridge & Ackerman, Architects.**

The Interiors of the Residence of

Hon. Truman H. Newberry

(Illustrated in this issue)

Also the Furniture and Decorations were executed by
The Hayden Company

Who also did the Interiors and Furniture in the Residence of Mr. George D. Pratt, Glen Cove, L. I. (by the same Architects). Awarded the Gold Medal by "Country Life In America."

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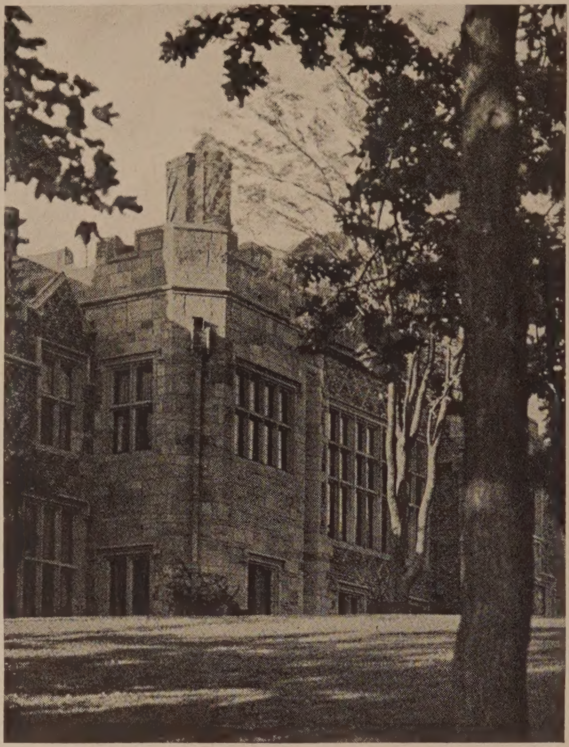

Main Stair Tower, Residence, Stuart Duncan, Newport, R. I.
John Russell Pope, Architect.

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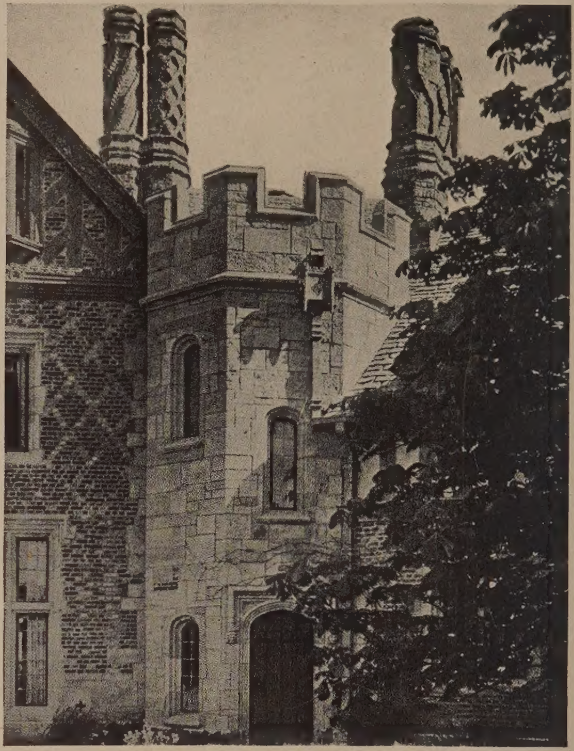

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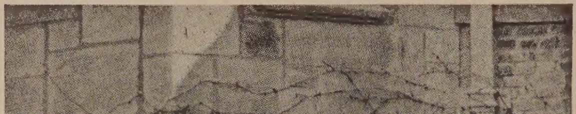

Doorway, Small Stair Tower, Residence, Stuart Duncan, Newport, R. I.
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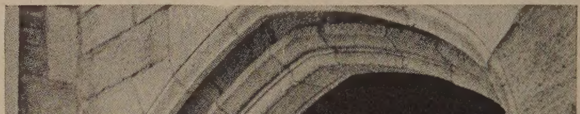
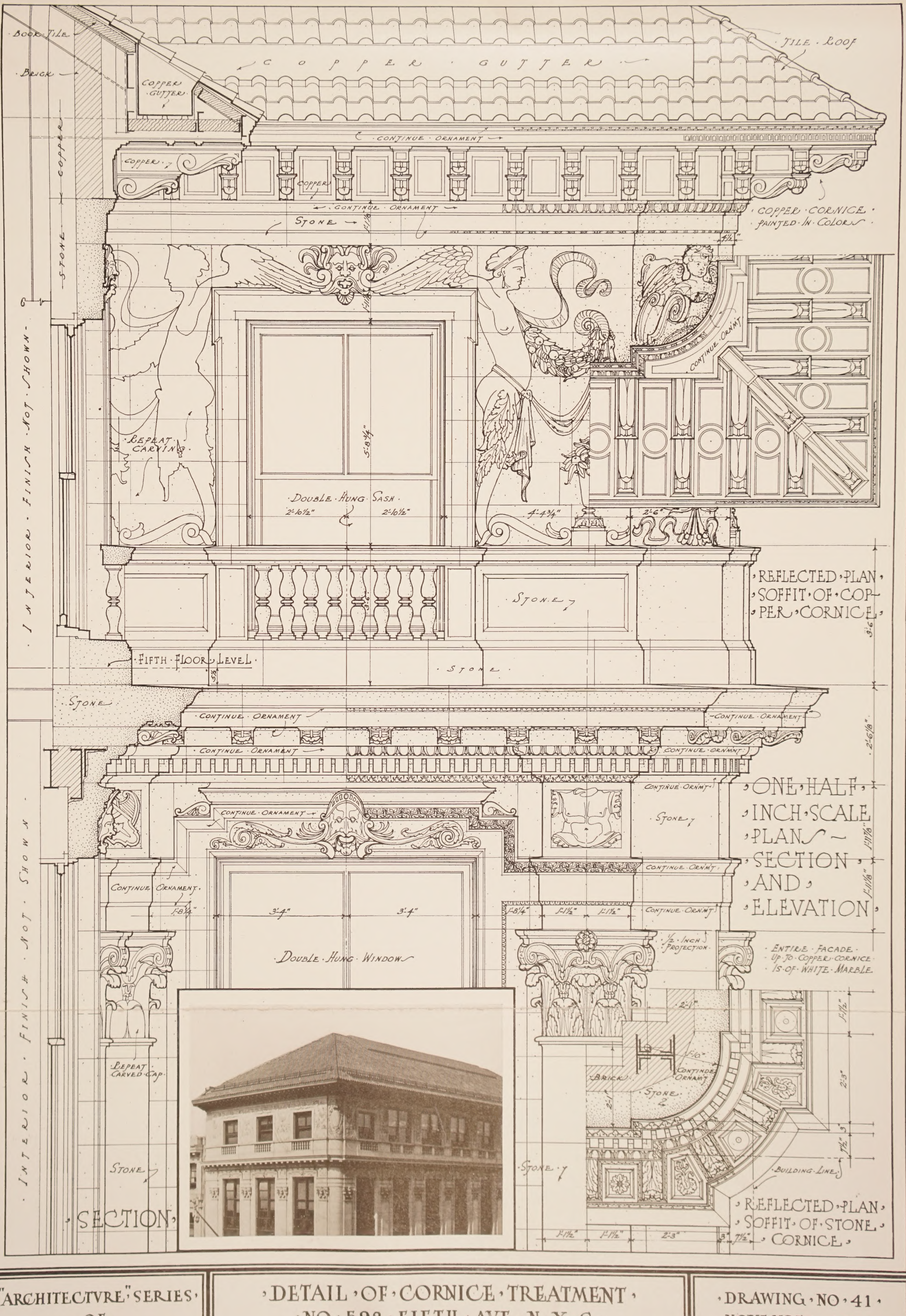


Detail, North Porch, Residence, Stuart Duncan, Newport, R. I.
John Russell Pope, Architect.



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